LEARNING TOGETHER

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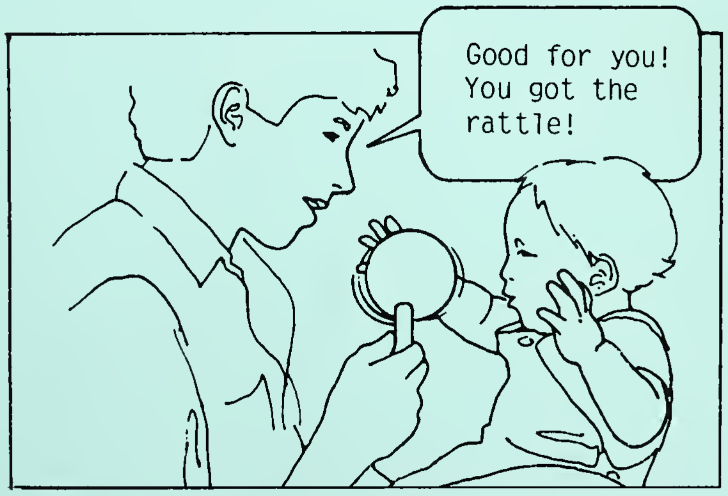
A PARENT GUIDE TO SOCIALLY BASED ROUTINES FOR VISUALLY IMPAIRED INFANTS


Good for you! You got the rattle!

By
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Clare Taylor Friedman
Gail Calvello

Parents and Visually Impaired Infants 7-96150-00
Learning Together A Parent Guide 7-68660-00

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Parents
And
Visually
Impaired
Infants

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Dedication

This guide is dedicated to the families who participated in the PAVII Project. We thank them for welcoming us into their homes and for teaching us how parents and infants live and learn together.

Acknowledgements

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- The Blind Babies Foundation for hosting the project.

INTRODUCTION

This guide is based on experiences of the PAVII Project, a model demonstration project of the Handicapped Children's Early Education Program. From 1985 to 1988 the San Francisco-based project served 27 families and their infants who were visually impaired. *Learning Together* contains activities which were identified as priorities by parents and accompanying strategies which were developed and used by parents and staff.

A Message to Parents:

Learning Together focuses on home routines, activities you usually do with your baby. We call them "socially based" because you do them together. In this way your baby learns with your help. We feel the suggested activities are most appropriate for infants between 6 and 24 months developmentally. However, you know your baby best and must decide when and which of these suggestions will be helpful, and then how you will use them with your baby.

In the interest of non-sexist terminology and for ease of the reader, we decided to alternate the use of "he" or "she," "him" or "her" when referring to the infant. "Parent" refers to a primary or significant caregiver. A glossary of terms (identified by *) is provided at the end of this book.

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CHAPTER 1

PHILOSOPHY OF *LEARNING TOGETHER*

The parent-child relationship is of primary importance, and intervention activities should strengthen that relationship. As a parent, you are your baby's most natural teacher. How you feel about yourself and what you are doing affects your relationship with your baby in important ways.

Learning Together suggests ideas and strategies for effectively meeting the needs of individual families and infants. The purpose of this parent guide is to fit ways of teaching your baby into daily routines and to provide ways for developing and evaluating these activities.

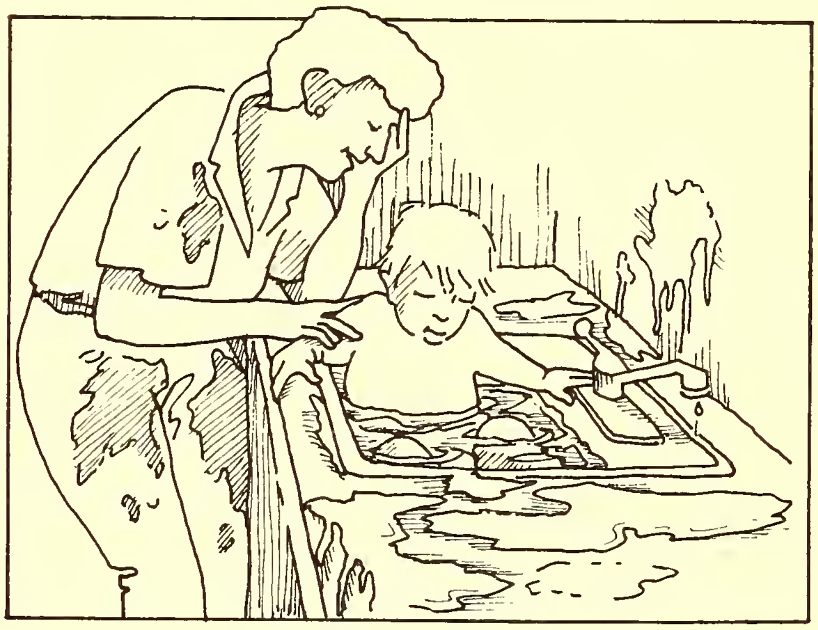
Main Ideas

- Interaction goes both ways

Your behavior influences your baby's behavior, and the way your baby acts influences you. At first the infant is not aware of the effect on you and must learn this through repeated interactions or shared experiences. You can plan these daily experiences to encourage your infant to repeat those behaviors you like.

Both you and your baby bring your individual likes and dislikes to your shared experiences. This influences how things "work out." If your baby gets overstimulated easily and you are an energetic, enthusiastic person, you may have to modify your natural style in order to have fun with your baby.

Parents learn to repeat facial expressions, actions and games which their infants most enjoy. Parents also learn to dislike, or even to dread, those activities which their babies dislike. For instance, if your baby always cries in the bathtub, you will begin to dislike bathtime, and your baby may sense tension in your voice and body. This will tend to increase the infant's distaste for the activity, and to begin a "vicious cycle."



If, on the other hand, you discover a way to relax your baby -- for example, by using a sponge insert in the bathtub -- the bathtime experience may become more pleasurable for both of you. This begins a "virtuous spiral," i.e., sharing experiences that are positive for you and your baby. Your sensitive responses to cries of hunger and discomfort and to other infant signals are the first important learning experiences. Your baby learns to make-things-happen and to depend on you. This essential basic trust (Erikson, 1980) fosters emotional well-being.

- Scaffolding helps a baby to learn

"Scaffolding" involves encouraging, prompting, and guiding infants to participate at a higher level than they can on their own. By using "scaffolding strategies," by adapting materials and activities, you can encourage your baby's emerging skills. Infants who are visually impaired* need specific scaffolds in order to learn about and participate in daily routines. This guide will give you ideas for using touch, sounds, and other cues to substitute for the information that vision usually provides.

Psychologists believe that parents serve as expert guides for an infant, by providing adequate "scaffolding" or ways of helping an infant to participate in the world (Vygotsky, 1978).

Scaffolding is used in the construction, maintenance or repair of a building; it supports the workers doing a job. Early games such as "peek-a-boo" and "I'm coming to get you" are examples of how to scaffold a baby's turn-taking. These preverbal experiences seem to help in later language learning (Bruner, 1976; Bates, Bretherton, Camaioni & Volterra, 1979). Think of your infant learning to walk, supported by your hands. You change and remove your physical support as baby's balance improves. Scaffolding is a temporary support and a very necessary support for a baby's early learning experiences. We believe that as you read this manual you'll find that you are using this principle already.

- Learning occurs in everyday routines

An infant who is severely visually impaired may not learn through casual observation of daily activities. However, teaching during routines provides the best learning opportunities for an infant. For example, mealtime is the best time to teach a baby about the texture, size, and shape of different fruits. How will this baby recognize a "banana" if you only offer small pieces? What about the size, shape, and peel? If the baby likes bananas, let him feel the whole banana, and have him pull on the peel before you give him a piece.

The advantages of using routines are that they are related to the infant's needs and interests, offer opportunities for repetition which help learning, and are based on social interaction.

COPING STRATEGY
TAKE BREAKS

Take breaks
Plan small breaks at home as well as larger breaks that involve going out. Breaks at home may be just relaxing, having a cup of coffee, watching TV, or reading a magazine.

It takes practice to take breaks because there are always things to be done

---

* Terms marked with asterisk (*) are defined in the Glossary, p. 39.

CHAPTER 2

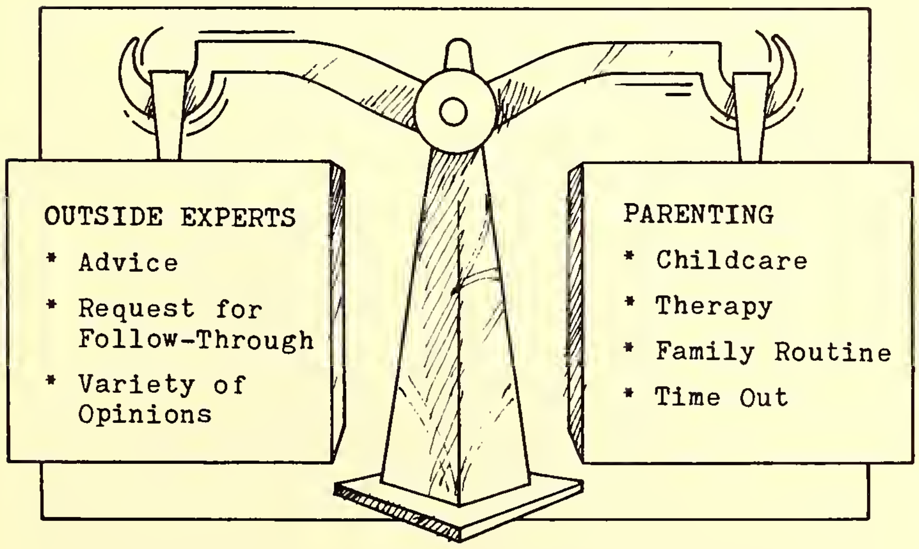
DECIDING WHAT TO DO

Parents often wonder if they're doing enough and if what they are doing is OK. This section discusses this common concern, and provides a way for deciding what you really want to do with your infant.

Main Ideas

• You know your baby best

You know his likes and dislikes, and when it's time to play, eat or have a nap. You are the expert on your baby. But you are not expected to be doctor, nurse, nutritionist, physical therapist, special educator, or speech therapist. If your baby has special needs, it's important to use professional expertise so that you can decide what is "right" for you, for your infant with special needs, and for your entire family.



• You are your infant's advocate

You have responsibility for requesting specific services, and for setting limits for your infant, and for yourself. Infant educators and therapists provide helpful suggestions for promoting your infant's development. However, some activities may not fit your values or time priorities; you have to decide what's most important. Some parents like to take notes on their infant's home activities and how often a new skill has been practiced. Others find this dreary, or feel guilty when choosing not to do an activity because it's too difficult or disruptive to the family routine. A routine that works for one family may not be suitable for another.

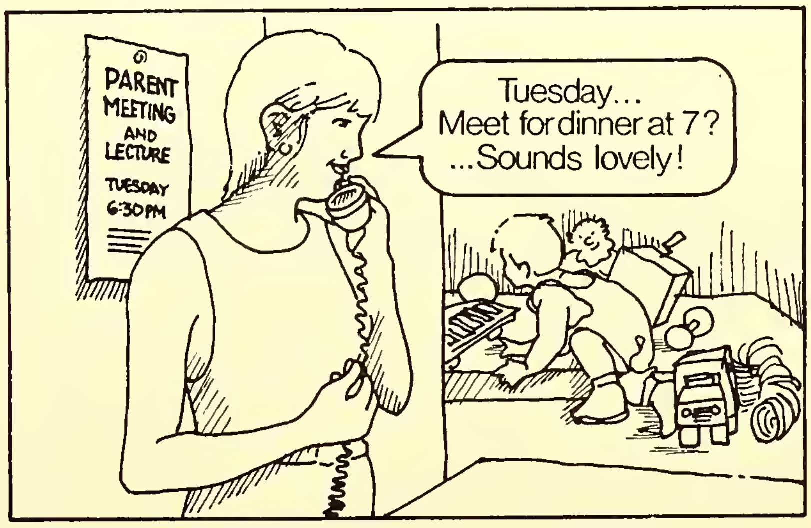
• Parents have different talents and preferences

It's important to say "That's a good idea but I can't work on it as often as you suggested. What's the most important time to try this?" or "I don't like to work on pegboards. What else can I do?" Let professionals know what does and doesn't work for you. Talking it over will produce more useful suggestions on how to fit activities into your routine.

Strategies

It's OK to say NO

As you play, work, and live with your baby, you will have to make choices and set priorities. An important skill to develop is the ability to say "No" and set limits for both yourself and your infant. You will not be able to take advantage of every opportunity that arises--afternoon programs, evening meetings, conferences, numerous events.


PARENT MEETING AND LECTURE TUESDAY 6:30PM
Tuesday... Meet for dinner at 7? ...Sounds lovely!

You will have to say "No, I can't do this now; I need time for myself, for my other children, to go out to dinner with friends, to read a novel, or take a nap."

Taking care of yourself is as important for your baby as anything else you can do. Tired, overstressed parents are not at their best.

A "cost-benefit analysis" will help you decide if the benefit of a particular activity is worth the cost in time and energy. This way you can spend your energies where they will reap the most benefit, and you will protect yourself from becoming burned out.

Making choices for yourself will allow real enjoyment and pleasurable interactions with your infant. We all want to meet our children's needs as best we can, within the limits of our time and energy--THE ONGOING BALANCING ACT OF PARENTING.

Should I really do this?

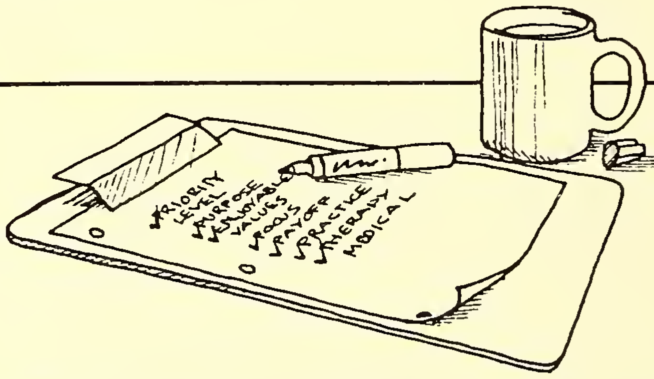
The following statements are examples of parents voicing their concerns about particular learning activities:
- "It's hard for me to insist that Jamie drink from a cup; he fusses so and wants his bottle."
- "I dislike doing those puzzles; but his teacher wants us to work on shapes."
- "I feel silly playing those baby games, but she seems to have so much fun."

It's important to understand the purpose of a specific activity. Then you can work on the goal in other ways. For example, by playing with puzzles, your infant is learning about size and shape and how to put things together. If you don't like to do puzzles, there are different ways for learning these skills, for example, by playing in the kitchen with cups, bowls, and spoons.

The "To-Do-or-Not-To-Do Test"

You can select learning activities by using the following test. The case for a certain activity is strengthened by each "yes" answer. Some of these questions will be more important for you than others. You can use these questions to identify what you really want to work on. It's a good idea to share this procedure with your program and to discuss your priorities. This way program staff will know what suggestions will be helpful.

This test may be particularly useful for deciding whether to continue an activity which the baby resists, such as cup drinking. Your infant's behavior will indicate when it's time to "back off," for example, when an infant is tired, not feeling well, or overstimulated. When the infant seems able to participate in the activity, it's time to try again.



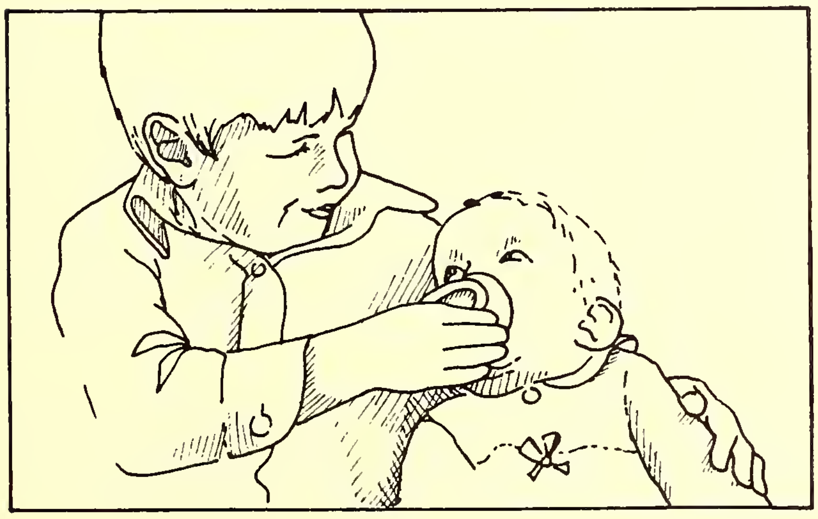
The "To-Do or Not-To-Do" Test

1. Is the activity or the goal of the activity your priority for your baby?
2. Does it have a purpose?
3. Is it enjoyable for you both?
4. Does it fit with your family values?
5. Do you have the desire, time, energy or help to focus on this activity?
6. Does it have an immediate payoff for you? Or for your baby?
7. Are there opportunities for repeated practice?
8. Does your infant need to participate in this activity, or to learn this skill at this time, or can this wait?

What about medical considerations?

You have to take medical considerations into account. Your doctor may prescribe certain therapies, such as patching your baby's stronger eye to strengthen the weaker one. In this case, certain questions of the "To-Do-or-Not-To-Do" test may not apply; for example, #3 "Is it enjoyable for you both?" The answers to other questions will carry more weight; for example, #8 "Does your infant need to participate in this activity at this time?"

Medical limitations and cautions must guide the choices you make. You know your infant's physical condition and potential problems. Carefully observe your baby's responses. If your baby is prone to having seizures, you will want to avoid stimulation which may elicit them, such as flashing lights, strong vibrations, and fast-spinning motions. If your baby startles often, the stimulation of sound, light or touch is too intense and you need to "soften" it. If you have concerns about an activity, be sure to discuss them with your program and your pediatrician, neurologist or ophthalmologist.



How can I work on everything?

No one can do everything or even one thing all the time. Begin with one small goal that will be easily accomplished. It may be simply having the baby sit in the high chair with food on the tray during family dinner. Think about how the rest of the family might help with this or other goals.

There are many opportunities to work on selected goals in several situations. For example, if a goal for your baby is to reach for and grasp a desired object, you can work on having her reach for a cracker during mealtime, for a toy at playtime, and for a sponge in the bath.

If you work on what your infant needs during everyday activities, you'll be working on many skills--the infant's interaction with people and objects, movement, and learning to use sensory information in natural and meaningful ways.

COPING STRATEGY
SETTING LIMITS

Know and respect your limits

Know what you are and what you are not able to do. This is a sign of strength, not weakness. To do otherwise may lead to exhaustion and to feeling overwhelmed.

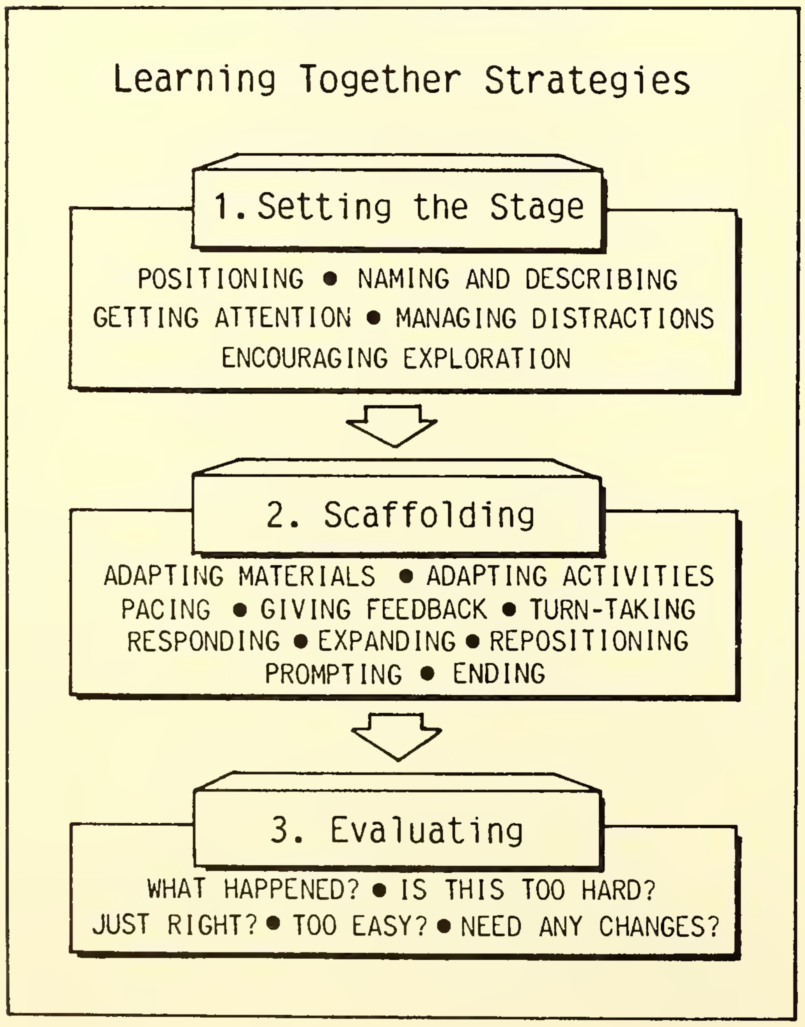
CHAPTER 3

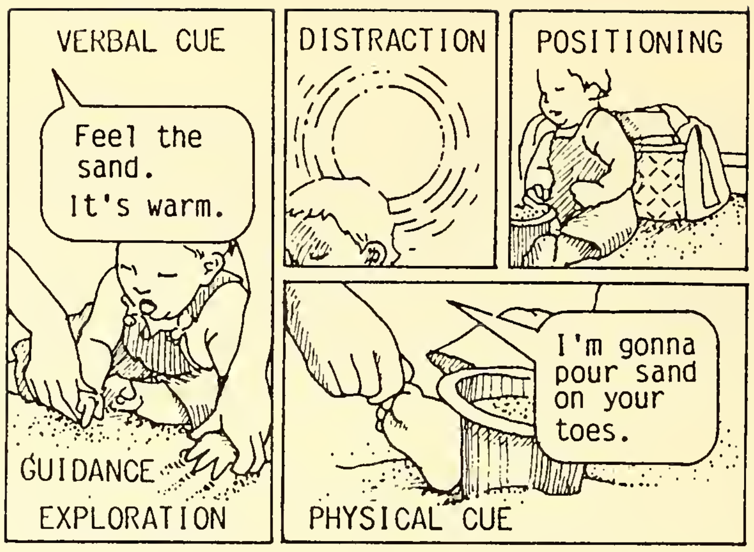
TEACHING STRATEGIES

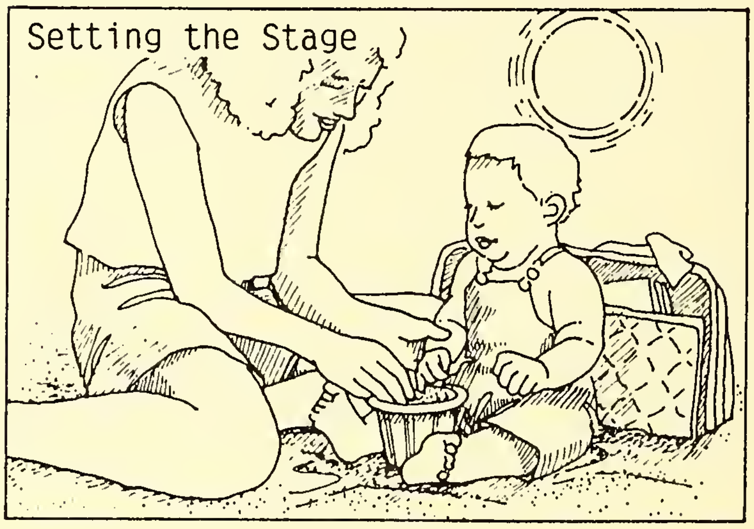
I've decided what to do; now how do I do it?

Strategies

Once you have selected goals for your infant, there are two sets of strategies which will help your infant anticipate and participate in the activity. We call these *setting the stage* (preparing) and *scaffolding* (supporting) strategies. Questions are provided to help you use a particular strategy. We believe that *how you do an activity is as important as doing the activity.*


Learning Together Strategies
1. Setting the Stage
POSITIONING • NAMING AND DESCRIBING
GETTING ATTENTION • MANAGING DISTRACTIONS
ENCOURAGING EXPLORATION
2. Scaffolding
ADAPTING MATERIALS • ADAPTING ACTIVITIES
PACING • GIVING FEEDBACK • TURN-TAKING
RESPONDING • EXPANDING • REPOSITIONING
PROMPTING • ENDING
3. Evaluating
WHAT HAPPENED? • IS THIS TOO HARD?
JUST RIGHT? • TOO EASY? • NEED ANY CHANGES?





1. Setting the Stage

Setting the Stage strategies include *what you say and do, where you are,* and *what you give the baby* to indicate what-is-going-to-happen. For example, saying "We're going for a walk," putting on a coat, and putting the infant in a stroller prepares the baby for "going out." An infant with a visual impairment may not be able to observe your behaviors and other visual cues which signal getting ready for an activity.

Positioning: Is your infant safely supported, able to reach and handle objects? Is there adequate lighting for this activity? Is this a good place or position for this activity? Are you in a comfortable position for helping?

Getting attention: How do you get your baby's attention? Do you use your voice, touch him, offer objects, or tap objects? How do you limit distractions?

Encouraging exploration: Do you give your infant time to explore the materials? Do you point out how things smell, taste or feel?

Giving directions or naming: Do you name or describe what you have offered, for example, "Here's some applesauce"? Do you tell the baby what to do, for example, "Hold your spoon"?

Managing distractions: Is your baby distracted by a light source, the television, radio or other things?

2. Scaffolding Strategies

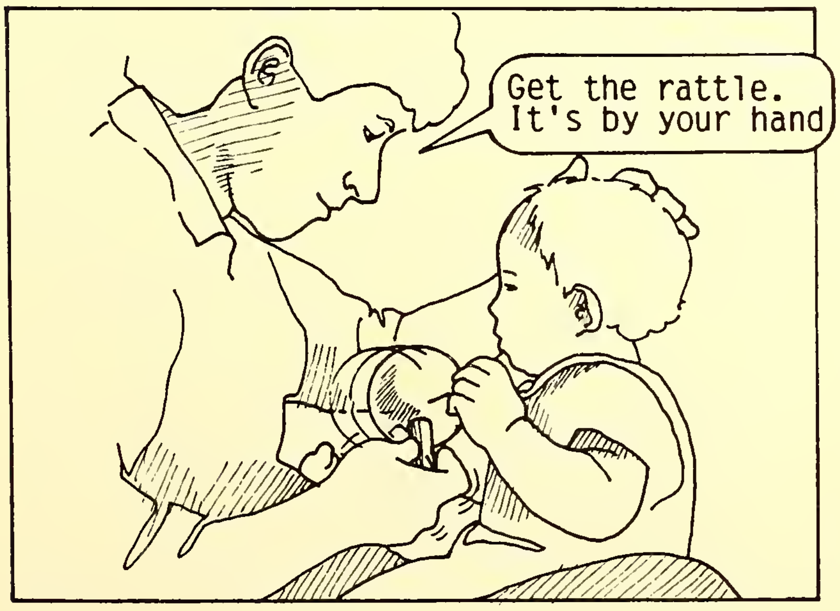
Scaffolding strategies are adaptations to materials or to activities which help your infant understand and participate in what is going on. These involve verbal, physical, tactile prompts, and other cues. They provide information, help a baby take a turn, give feedback, and keep your infant's interest in the activity.

Adapting materials or activities: What changes have you made for your infant's special needs?

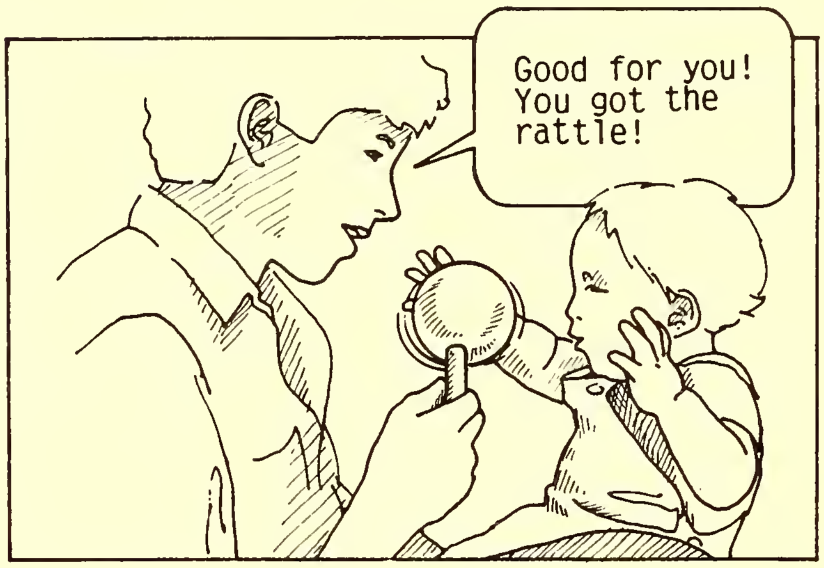
Repositioning: Do you need to rearrange objects or change positions to get your baby to participate?

Providing feedback: How do you let your baby know that you're pleased with what happened? How do help your baby know what to do?

Pacing: Do you need to change the timing of your touch, movements, voice, tapping or other auditory cues to keep your infant's interest? Do you allow enough time for your infant to respond?



Prompting: Do you need to use different cues to get your baby to participate (modeling, guiding or touching the baby's hands, tapping the object, using your voice)? Do you gradually decrease the amount of assistance or prompts?


Good for you!
You got the
rattle!

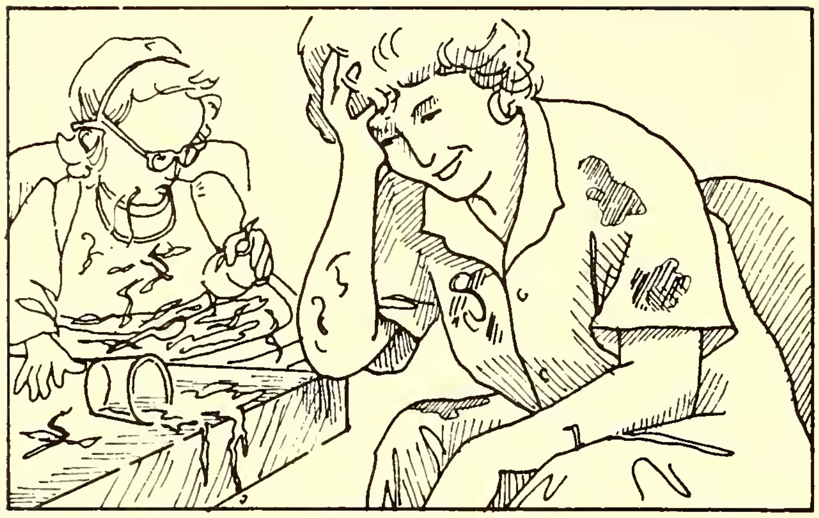
Turn-taking: How do you give your baby a turn? How do you signal whose turn it is?

Expanding: Do you add new information to your infant's sounds or behaviors?

Responding: Do you change, switch, or stop the activity according to your infant's behaviors?

Ending: How do you signal that you're adapting, switching, or stopping an activity?

3. Evaluating What Happened



Do you feel this activity was too hard, too easy, or just right for your baby? Do you need to make any changes?

COPING STRATEGY

PARTIALIZE

Take one step at a time to complete a big task
Cut each task or list of things to do in half and then divide by two. This way you will have control over what needs to be done, and you'll have a large goal (e.g., clean out refrigerator), define the steps and do only a bit at a time. Example:

a. Throw out all old food in the refrigerator.
b. Clean bottom shelf.

CHAPTER 4

HOW BABIES LEARN

Babies use environmental cues and learn from everyday happenings. The next four sections discuss important learning areas for infants who are visually impaired:

Learning to look: How to encourage the infant's use of residual vision* in a functional* way.

Learning to listen and to communicate: How to help your infant understand what sounds mean, and how to communicate.

Learning to play: How to encourage your baby to play with objects.

Learning to move: How to help your baby develop motor skills.

LEARNING TO LOOK

Main Ideas

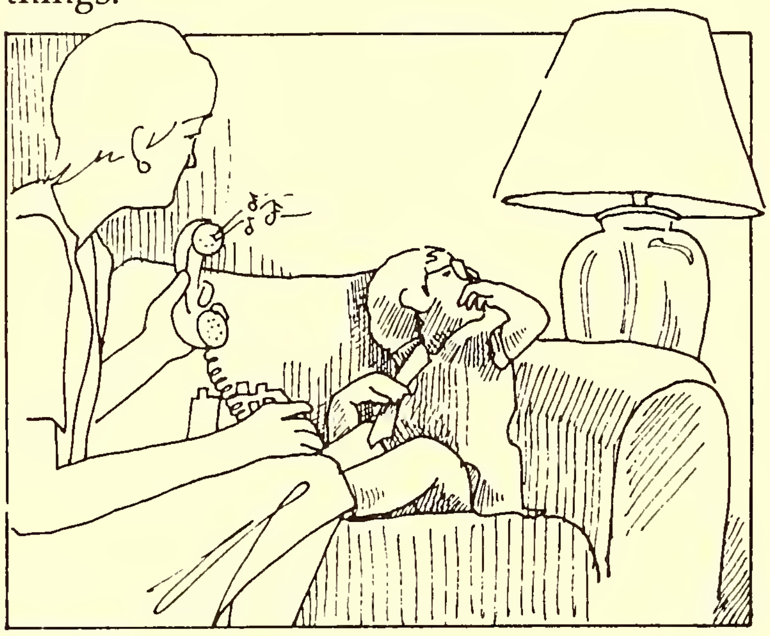
∞Legal or medical definitions rarely provide all the information about an infant's vision.

Although the diagnosis may not change, your baby's use of vision may develop dramatically.

∞Your baby needs encouragement to use her vision.

This may be particularly true if she has a lot of rapid eye movement or nystagmus*. It may be difficult for this baby to focus her eyes. It takes time, experience, and many opportunities to begin to make sense of the visual world.

Positioning. It's easier for your baby to look when she is securely positioned (in an infant seat or lying on her back) than when she is working on balancing her head or pushing up on her arms. Your baby may see better in one position than in another. Try different positions. Some babies are distracted by lights or sunshine. Try to position your baby so that the light source is behind her. That way she can pay attention and look at other things.



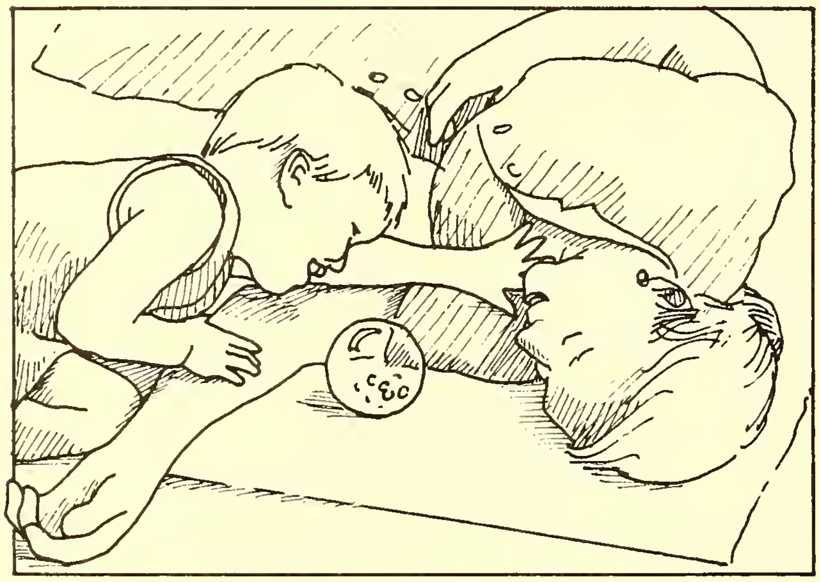
Making Observations. As you play with and observe you baby, you'll discover how she uses her vision. Share this information with the infant program and ophthalmologist or optometrist. Here are some questions to guide your observations:

- Does your baby see better in dim or bright light?
- Does she focus better on objects held to one side, or at midline of the body?
- Does she prefer looking at faces or objects? Things that are stationary or moving?
- Does she tilt her head to look?
- Is there less nystagmus when her eyes or head are in a certain position?
- Does your baby look at brightly colored objects? Black and white objects? Shiny objects, such as, tinsel, mirrors, jewelry?
- Does she stare at lights or patches of sun light?
- Does she watch you walk across the room?

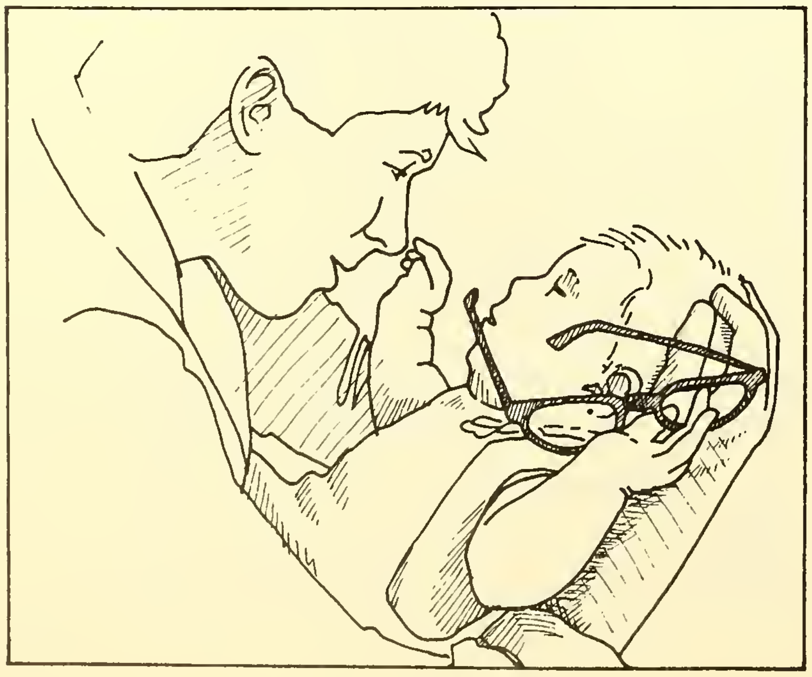
Scaffolding Strategies

Face-to-face games

Face-to-face interaction is one of the earliest ways to play with a baby. Babies like to look at and touch your face, hear your voice, and feel your breath.



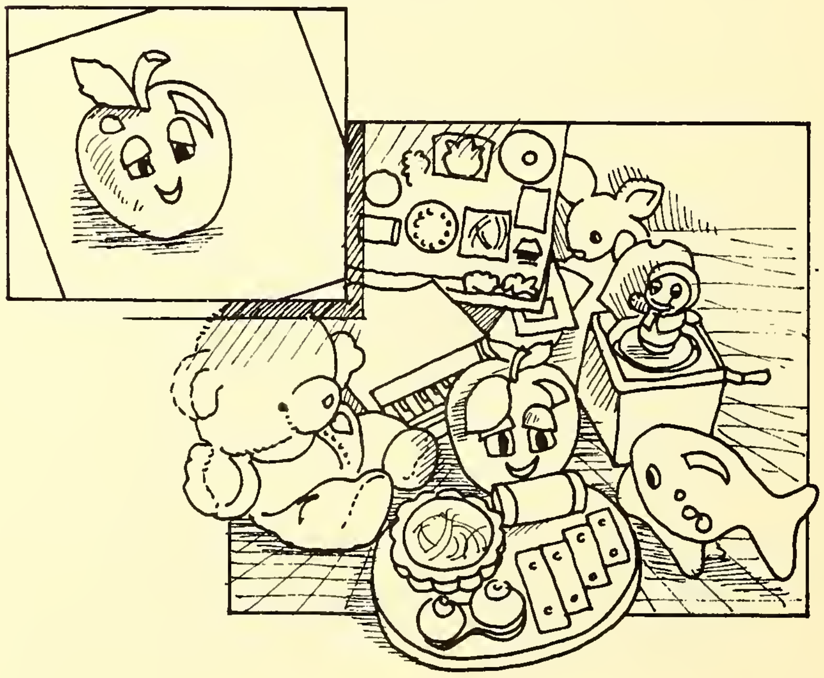
Positioning. Position yourself so that your infant is secure and you can see your baby's face. You will have to judge the best position and distance for your baby to see your face, especially if your baby has a field loss* or tunnel vision*. If your baby has a cortical visual impairment* or nystagmus, she may need to tilt her head to see you. As your baby gains strength and motor skills, try lying on your tummies, face-to-face, and encourage your baby to reach toward your face. Or lie on your back and place your baby on your chest.



Getting attention. You have to be entertaining to attract your infant's attention. Talk to her, coo, nod your head, make big smiles and kissing sounds or other exaggerated lip and tongue movements. Put a sticker or a dab of bright color on your nose. You may feel silly, but your baby's delight makes it fun! Play naming games by touching parts of your faces; for example, place baby's hand on your lips, nose, or hair. Then take-a-turn and say the word again as you touch baby's mouth, nose, hair.

Playing with Toys

Getting attention. Select one or two toys which will attract your baby's visual attention. Begin with toys that have bright colors or high contrast and make sounds. A bright red Happy Apple on a white towel is easily seen.



It's difficult for a baby to distinguish one object from another if several toys are placed on a patterned blanket. Begin with one or two toys on a solid background. When your baby seems to recognize these, add new ones.

Visual Self-Stimulation. Some infants with visual impairments develop self-stimulation behaviors which involve the visual system. Babies engage in these behaviors more frequently when they have nothing else to do. Light-gazing, hand movements in front of eyes, and eye pressing are influenced by the infant's age, type and degree of visual impairment, and other handicapping conditions. For example, one study has suggested that eye pressing may be more intense in babies with retinal disorders (Jan et al, 1983). If a very young visually impaired baby is not totally blind*, light gazing is the earliest sign of self-stimulation. Next, babies will become aware of their hands, and may begin holding or waving a hand in front of the eyes. Eye-pressing seems to appear between 8 and 10 months of age (Jan et al, 1983) and may occur when the infant is tired, anxious, bored, or listening.

However, babies may press their eyes in response to eye pressure or pain. If you're concerned about your baby's eye pressing, do check with your ophthalmologist. In addition, light-gazing and hand movements in front of the eyes may be the first indication that a visually impaired infant is not totally blind, and may be learning to look. These behaviors meet the infant's need for stimulation. It's important to recognize them as functional* and to allow the baby this visual practice. You know your baby best and will need to decide when to distract her from these behaviors.

Self-stimulation behaviors may become habits which interfere with how an infant interacts with you and how she participates in activities. If this happens, try the following suggestions:

1. When possible, position your infant so that the light source is not distracting.

2. Give your baby something else to do, e.g., offer toys or play games.

3. Say "Hand down" and gently push the baby's hand from in front of her eye; then offer a toy to keep her hands busy. Remember it's more helpful to say "what to do" than "what not to do."

LEARNING TO LISTEN AND TO COMMUNICATE

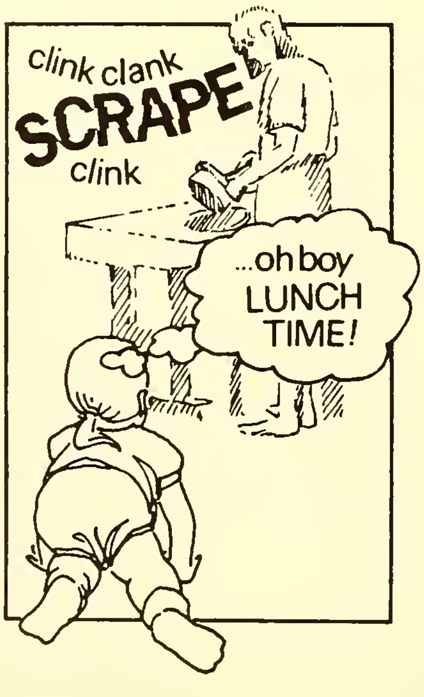
Main Ideas

- Listening is an important skill for infants who are visually impaired.

These infants may not know what's making a particular sound. The infant who is totally blind may experience what he hears as meaningless. Sounds will not become meaningful unless we tell the baby what's making the sound.

- Sounds let us know what's happening and prepare us for what's about to happen.

Familiar sounds provide security for routine events. Sounds encourage a baby who is totally blind to explore and provide a way of keeping in contact with what's going on.



The Listening Environment

Close your eyes and listen. What do you hear? Is the television or radio on? Background sounds make it more difficult for the infant to pay attention to your voice and other important sounds. On the other hand, we should point out and name familiar and unfamiliar sounds. Some of these sounds may become "landmarks" for the infant who is totally blind (for example, the hum of the refrigerator or squeak of a rocking chair). The infant has to learn what sounds to ignore and when to pay attention.

Strategies to encourage listening

Getting Attention. The infant has to be aware of and pay attention to sounds.

1. Get your infant's attention: "Peter, listen."

2. Name or describe the sound: "That's the vacuum; it's loud."

3. If possible, take the infant to the sound source to see or feel it.

Pacing. "Tune your infant in" by varying intonation, using higher pitch and speaking slowly. Research shows that adults and older children speak to infants in a particular way. So-called "motherese" uses short sentences, exaggerated intonation, higher pitch, and slower than usual speech to get and keep an infant's attention. "Motherese" tells an infant when we're talking to her.

Some factors that interfere with listening

1. *Ear infections.* Many babies have recurring ear infections. Fluid in the middle ear will interfere with what your baby hears, and may affect speech development. If an ear infection occurs, your baby should be seen by a physician.

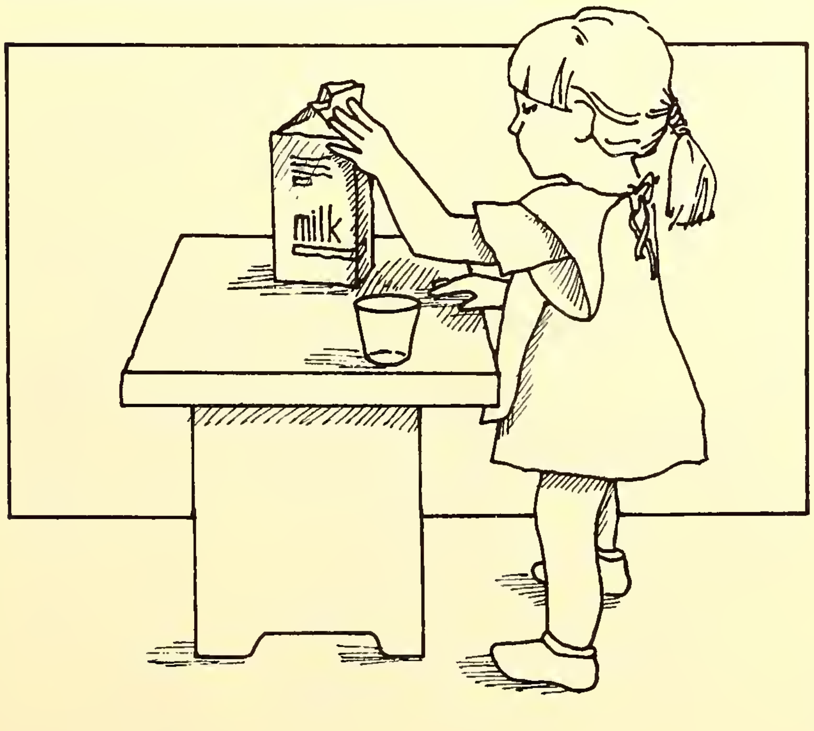
2. *Hearing loss.* Some visually impaired infants are also hearing impaired. If you suspect a hearing loss, your infant should be tested by an audiologist. If necessary, you may want to locate a resource that can provide programming for infants who are deaf/blind (see Resource List and section on Introducing Signs).

How to Understand your Infant's Communication Efforts

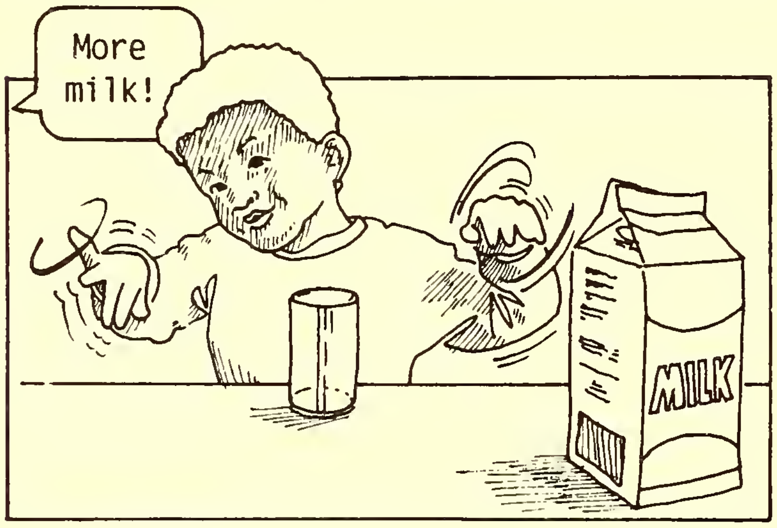
Babies communicate from birth, long before they develop language. Communication involves a way to send and receive a message. *First*, babies communicate preverbally with their bodies about basic needs and desires. We read messages from their cries, facial expressions, body posture, behavior changes, gaze shifts, and vocalizations.

We interpret these behaviors as protests, requests and responses. This is the beginning of communication.

Next, infants develop other preverbal ways to get a message across. They communicate about things that are present by reaching, pointing, showing, touching and other gestures.



Infants who are totally blind cannot use looking, pointing and showing. We need to look for behaviors that signal requests or "I want..."; for example, some babies show excited hand or other body movements when they want something.



Finally, infants use words and they are able to communicate about things which are not present, events of the past or the future.

Scaffolding Strategies

Infant games: First conversations. Parent-infant games, action songs or nursery rhymes are a normal part of an infant's life in many cultures. Parent-infant games are baby's first "conversations" (Snow, 1977). These early play routines teach the infant valuable conversational skills: how to take turns, how to wait for a response, and what to do next. Babies like repetitive games that have a predictable climax.

The earliest games are filled with physical action, rough and tumble, bouncing and tickling..."I'm coming to get you." Babies who are totally blind usually smile in response to these games. Most babies, including those with visual impairments, enjoy some adaptation of "Peek-a-Boo" or "Peep-Eye." A baby who cannot see can still enjoy pulling a scarf off her head.

Action games are early favorites of toddlers... "Head, Shoulders, Knees, and Toes" and "Open, Shut Them." Next, infants enjoy action songs like "Wheels on the Bus" and nursery rhymes such as "Twinkle, Twinkle, Little Star," "Old McDonald," "Eensy Weensy Spider." At this age, infants enjoy the movement and rhythm involved in these old favorites.

Some educators feel the vocabulary of certain nursery rhymes, for example, "Eensy, Weensy Spider," is meaningless and the concepts are not functional for an infant who is visually impaired. However, at this age, babies are listening to the rhythm and intonation of nursery rhymes rather than understanding the content. You may have your personal opinion about these songs. We feel these songs are valuable because they are age-appropriate and part of our culture. Furthermore, infants love them and can sing them with their friends. It is important to sing both traditional nursery rhymes and songs which are meaningful to a baby (see Resource List).

Turn-taking. Here are some ways you can take a turn with your infant:

WAIT FOR THE INFANT TO TAKE A TURN AFTER YOUR VOCALIZATION
  Parent: "Are you hungry?"
  Baby: Reaches for the spoon or other indication of interest in being fed.
SPEAK FOR THE INFANT BY INTERPRETING BEHAVIOR
  Baby: Smiles
  Parent: "That's fun. Let's do it again."
  Baby: Turns head away
  Parent: "You don't want to do this any more."
IMITATE INFANT VOCALIZATIONS
especially the sounds you want to encourage.
  Responding: INTERPRET AND RESPOND TO INFANT VOCALIZATIONS
  Baby: "Ah, ah"
  Parent: "Is that so?" or "That's right."
  Expanding: EXPAND INFANT VOCALIZATIONS
  Baby: "Mmm"
  Parent: "Mama. You want mama?"

The following examples provide a baby with opportunities for turn-taking and early "conversations":

- Vocal play (imitation, babbling, whispering, intonation changes, vocalizations accompanying movements, e.g., "uh oh," "ah boom").

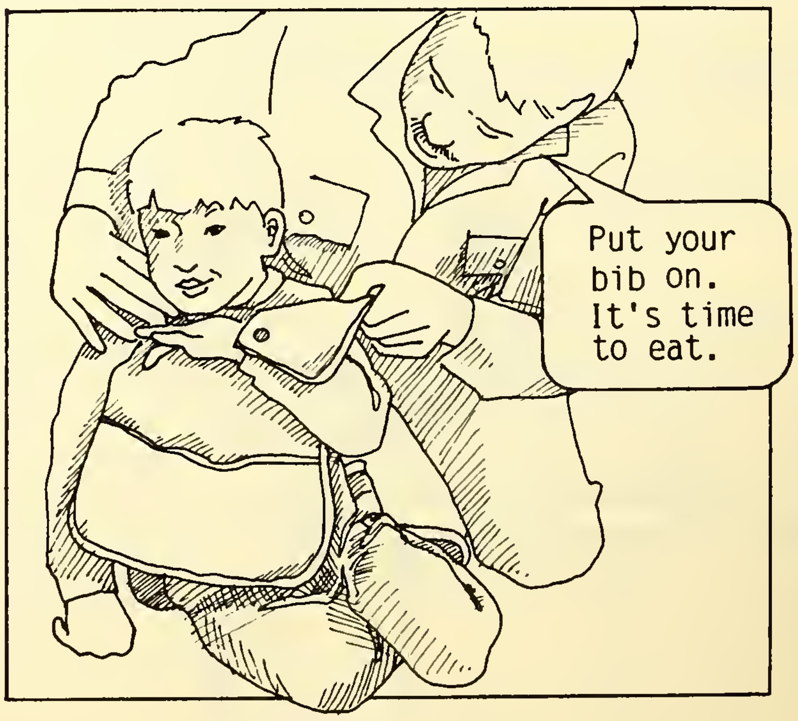
- Social games, singing and nursery rhymes, e.g., "I'm Coming to Get You," "Peek-a-Boo," "So Big," "Open, Shut Them," "Row, Row, Row Your Boat," "Old McDonald."

- Playing with sound toys, e.g., "Shake, shake, shake. Shake the rattle."

- Playing "listen-and-find" games with sound cues, e.g., "Here's a rattle (shake rattle). Come and get it"; "Where's the music box? Let's find it"; "Mary, I'm over here by the sofa. Come to Mommy."

- Naming and commenting on environmental sounds and searching for the source when possible, as in "I'm doing the laundry, washing dirty clothes. Listen to the washing machine. Come find it. Here, it's by the sink."

Naming and describing. Infants learn what things are called by seeing, touching, and handling them, as well as hearing their names over and over again. These active experiences are even more important for an infant who is visually impaired. The best time to describe things is when they are happening. In this way, infants learn to associate what-is-happening with what-it's-called.


Put your bib on. It's time to eat.

Signals and gestures. Before infants develop verbal communication, it helps to provide an object signal to indicate what's about to happen. For example, a bib to indicate "Let's eat" and a coat to mean "going out." In the beginning your baby needs many other cues or scaffolds to understand your verbal directions. For example: "Give it to me"--touch your baby's hand holding the object. "Come here"--pat the chair or offer hands (touch the infant who is totally blind).

Remember to use conventional gestures such as "yes/no," "come here." Sometimes you may need to use other gestures to get the message across. Develop gestures based on what your infant does with the object or in the activity. For example:

- Kicking legs to indicate swing

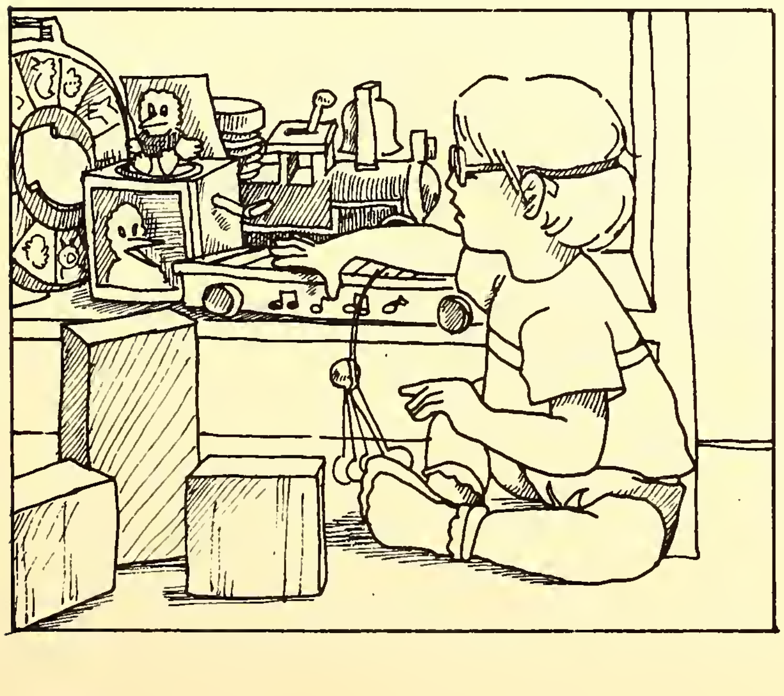
- A bobbing motion to indicate rocking horse

LEARNING TO PLAY

Main Ideas

- Babies need to feel capable.

We all need to feel our actions have some effect. We dislike feeling helpless and out of control. Babies need to have opportunities to make things happen; they work for a sense of control from their earliest interactions. At first, babies get this sense of control from social responses; later they learn how to manipulate objects. The baby who has a "What can I do with it?" attitude will learn more than the baby who has learned "I have to wait for Mom to do this."



Toys which respond to babies' actions are the most interesting. Interactions with these toys help develop the baby's self-image as active and capable. It is especially important for the baby who is totally blind to have toys which make sounds when shaken or have movable parts to manipulate, rather than just being cute or pretty to look at. Try to evaluate toys from your baby's perspective: close your eyes and manipulate it to see if it is interesting tactually--not only "How does it feel?" but "What can I do with it?". What a baby does with a toy will vary according to development and interest. For example, a young baby will mouth or bang rings of a donut tower, while an older infant may be more interested in stacking them.

- Real objects provide important information.

All babies learn from playing with toys, but real objects and the real world provide them with even more important information. Your baby needs to feel the pots, pans, and bowls. She needs to open the cupboard doors to know where you keep things. She needs to help you squeeze the juice out of oranges to know where orange juice comes from. Many of the things that normally sighted babies may learn by watching and imitating their parents, your baby will learn by participating with you.

Setting the Stage

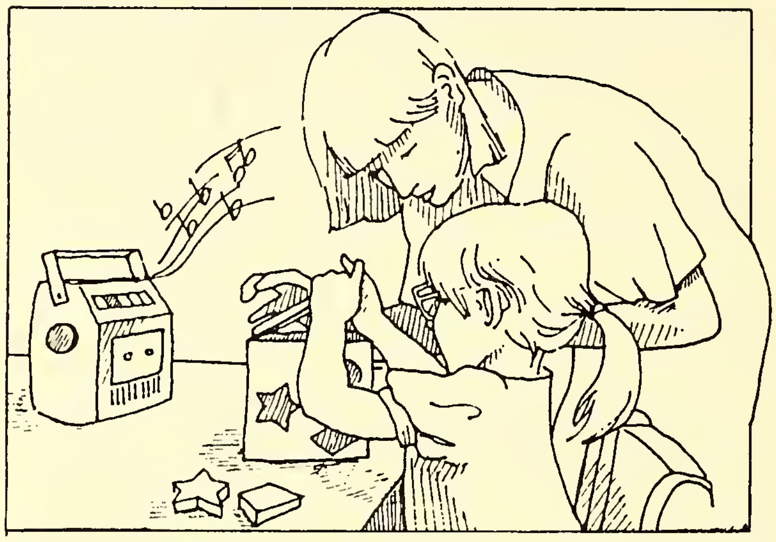
Positioning. A baby's position affects his ability to manipulate objects effectively. A good position is sitting securely supported with a table surface in front to keep objects within reach. If the baby is in a high chair, you can sit opposite the tray and see from facial expressions when he is happy, frustrated or wants something out of reach. When you work from in front of the baby, you can respond to his emotional responses.

Holding the baby on your lap helps a baby who needs physical support or assistance.

When you work from behind a baby you can feel muscle tone, control posture and movement, and give support. In this position, you can physically guide the infant; e.g., when taking shoes off you can both support and move the baby through the activity. When you are teaching a new skill, it is easier to work from behind, moving in the same direction as the baby and guiding him (rather than pulling him) through it. Babies are more likely to cooperate and less likely to resist when helped in this way.

Scaffolding Strategies

Pacing. Some babies with visual impairments do not use their hands to explore actively and do not like having their hands guided. If a baby likes music, songs may encourage him to manipulate and explore objects, such as "This is the way we open the box, open the box, open the box...." Use a favorite activity (singing) to scaffold a disliked one (physical guidance of object exploration).



Adapting materials. In order to act on toys, some infants with physical impairments will need adapted toys or pressure switches to activate toys (see Resource List). You may want to check with your program for other resources and equipment.

Suggested Activities

8-12 months
Putting objects in and taking them out of containers:

Coffee can play: Put blocks, poker chips in and listen for the impact on the bottom of the can. Pull off the top and pull them out. Cut hole in lid: large enough to make it easy, small enough to make it challenging.

12-24 months
In the kitchen:
- Give the toddler containers to open; have her "help" you open the jelly jar.
- Serve cookies in a round tin with a lid that's easy to remove.
- Help her use a child-size plastic pitcher to pour a drink (have a "tea party").
- Help her use a wire cheese slicer (no sharp edges) to slice semi-soft cheese.
- Bake cookies, brownies, muffins (using a mix simplifies it). The toddler can pour, stir and observe the process by which dry + wet = batter, which when baked becomes cookies!
- Spread butter, peanut butter, jelly, cream cheese on crackers, cookies, toast.

- Mash and mix the tuna or eggs with mayonnaise for sandwiches; then make a sandwich and eat it!
- Make jello or instant pudding.
- Pour chocolate into milk and stir.

Play dough -- homemade is best. Pound it, roll it out, cut it with cookie cutters, roll it into balls, make snakes, poke it, pinch it and pull it apart.

To encourage development of the pincer grasp:
a. Build awareness of index fingers
  - Play games with them; use them to point, touch, feel, place stickers on them to get the baby's attention.
  - Play hand tickling games and have the infant imitate on adult's hand; also use this as a signal for the game.

b. Offer small objects in containers
  - Cheerios in egg cups, raisins or Animal Crackers in snack-size box, cheese cubes in a little bowl.

LEARNING TO MOVE

Main Ideas

- Development of motor skills proceeds from the head to the feet and from the center of the body to the extremities.

This means a baby develops control of her head and trunk before her arms and legs. She also develops control of her large muscles before the small muscles that control fine movements.

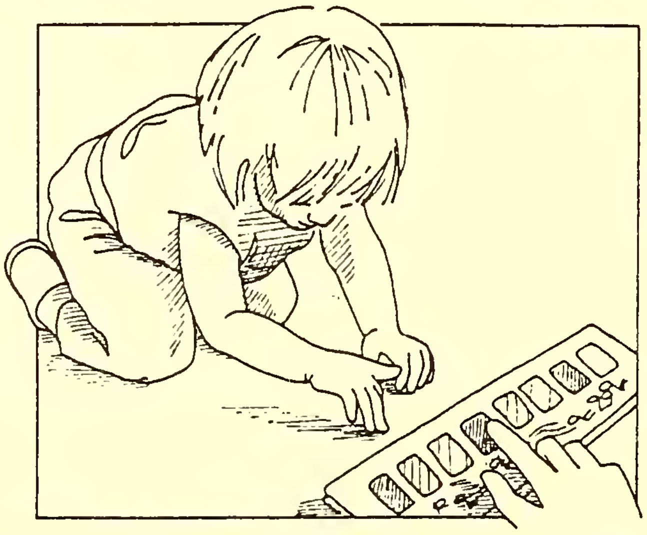
- Muscle tone is the basis of the baby's movement.

A baby with not enough tone (hypotonic*) is floppy and has difficulty maintaining positions. A baby with too much tone (hypertonic*) tends to be rigid and has difficulty moving. Normal muscle tone is high enough to provide stability (support the body) and low enough to allow mobility (enable the body to move) (Buttram & Brown, undated).

- Babies learn by moving.

Babies enjoy movement. Your baby begins moving before she is born. After birth we cradle, rock and jiggle newborns. We carry babies in front packs or back packs. We push them in prams and strollers. Early movement activities provide sensory experiences which help a baby learn to overcome gravity and control movement. They also help a baby learn about her body position in space. As a result the baby develops spatial orientation* concepts which form the foundation for later mobility*.

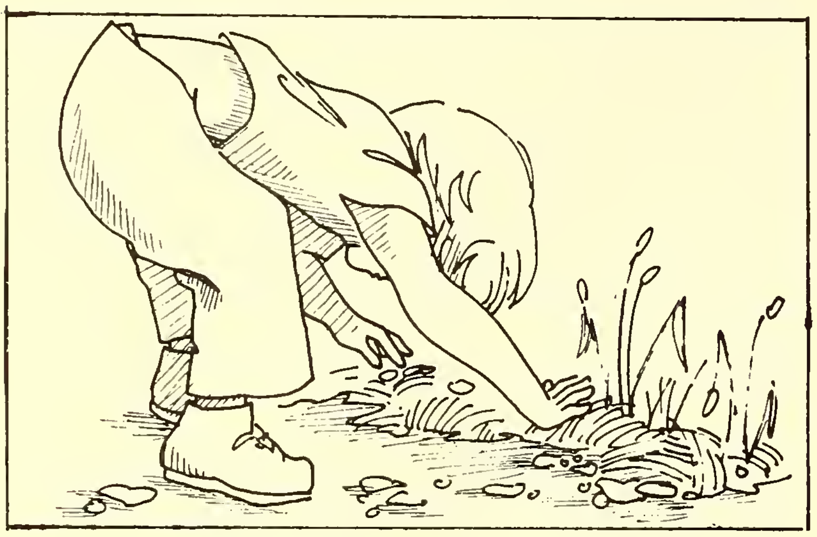
In order to learn how to move a baby needs many hours of practice. Movement games, such as tilting, rocking, and bouncing are fun. Later on, your baby will use the skills he learned in early movements and movement games to develop goal-directed movement, for example, crawling toward a musical toy.



Babies need to move. They are attracted by interesting objects and events around them. A baby who does not explore may develop repetitive movements such as rocking and jumping, or may seem to wander in a disorganized way. These repetitive movements may be the baby's way of trying to get some stimulation.

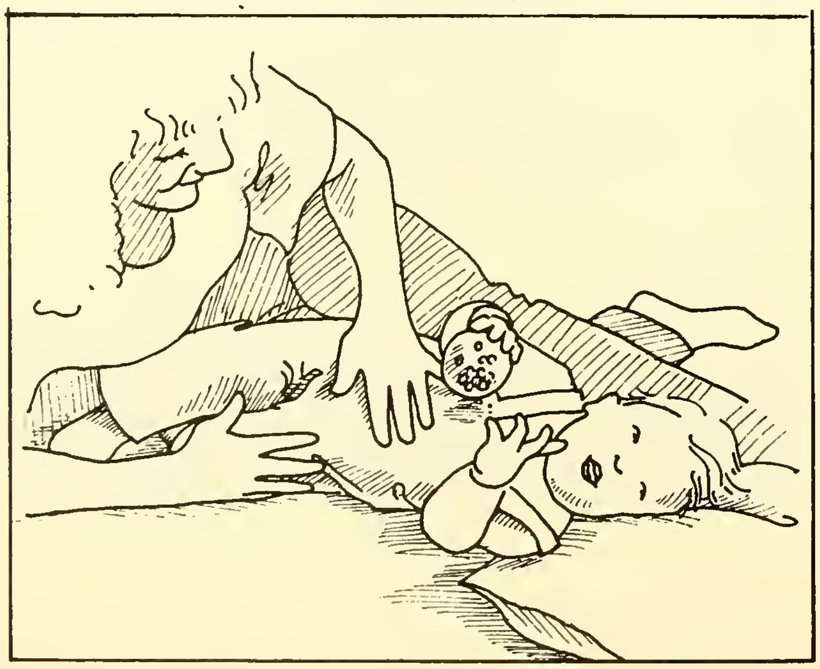
Strategies

Getting into and out of a position. It is easier for babies to maintain a position in which they have been placed than to move from one position to another. Babies will learn to sit before they can move from lying on tummy to sitting. Learning to move into and out of a position is an important movement skill for a baby.



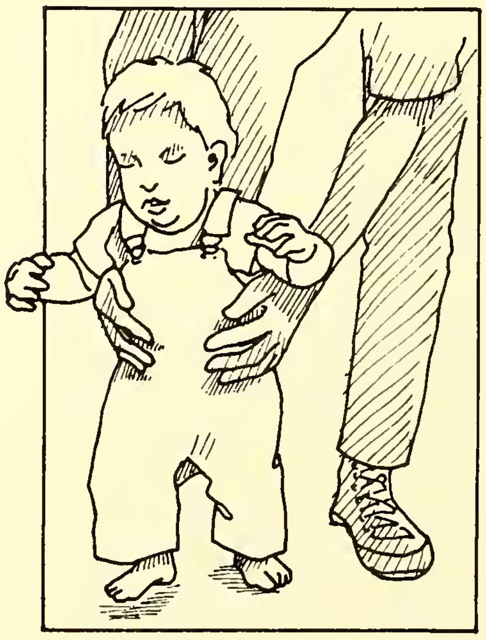
Weight-shifting. Before a baby can crawl or walk, she must be able to shift weight from one part of the body to another, for example from one arm or leg to the other arm or leg. Reaching for a toy at the side encourages weight shifting. Lying on her tummy, a baby learns to lift her head and push up with her arms, shifting her weight backwards. At first she needs to use both hands to support her weight. As she becomes stronger, she'll be able to shift her weight to one arm and reach for a toy with another.

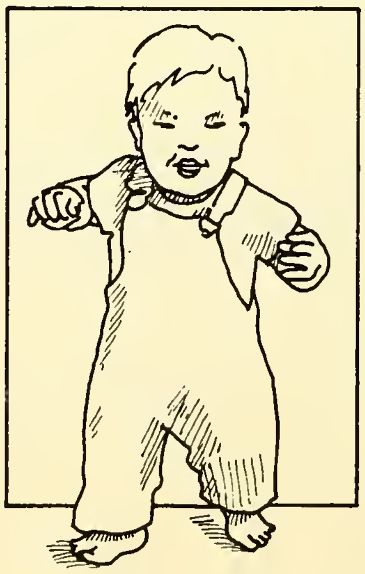
Experiencing the whole movement. Your baby needs to experience movement from one position to another. Early rolling games are a good beginning. When the baby is on his back, tilt his hips from side to side and develop a rolling game. Next, help him to roll over half way and then let him try to get on his tummy by himself. Allow a few moments for him to try to lift his head and push up on arms. After the baby can make one complete roll by himself (from back to tummy to back), show him how to do two or three rolls in the same direction.



Encouraging goal-directed movement. You can help movement become directed by using toys and other motivating objects in your play with the baby (e.g., "Roll to Mommy. Come get your bottle." "Get the toy").

Encouraging independent movement and control. A baby needs to participate actively in order to develop control over her movements. At first, a baby may need a lot of support. Gradually decrease support as the baby develops control over her movements. For example, with sitting, begin by giving support high on the baby's trunk. As the baby gains control, provide support at the hips. Finally, she will sit on her own.





When a baby is first walking, she needs support on both sides of her body (both hands held or hips supported). Next, she can walk holding your finger, and later will walk alone.

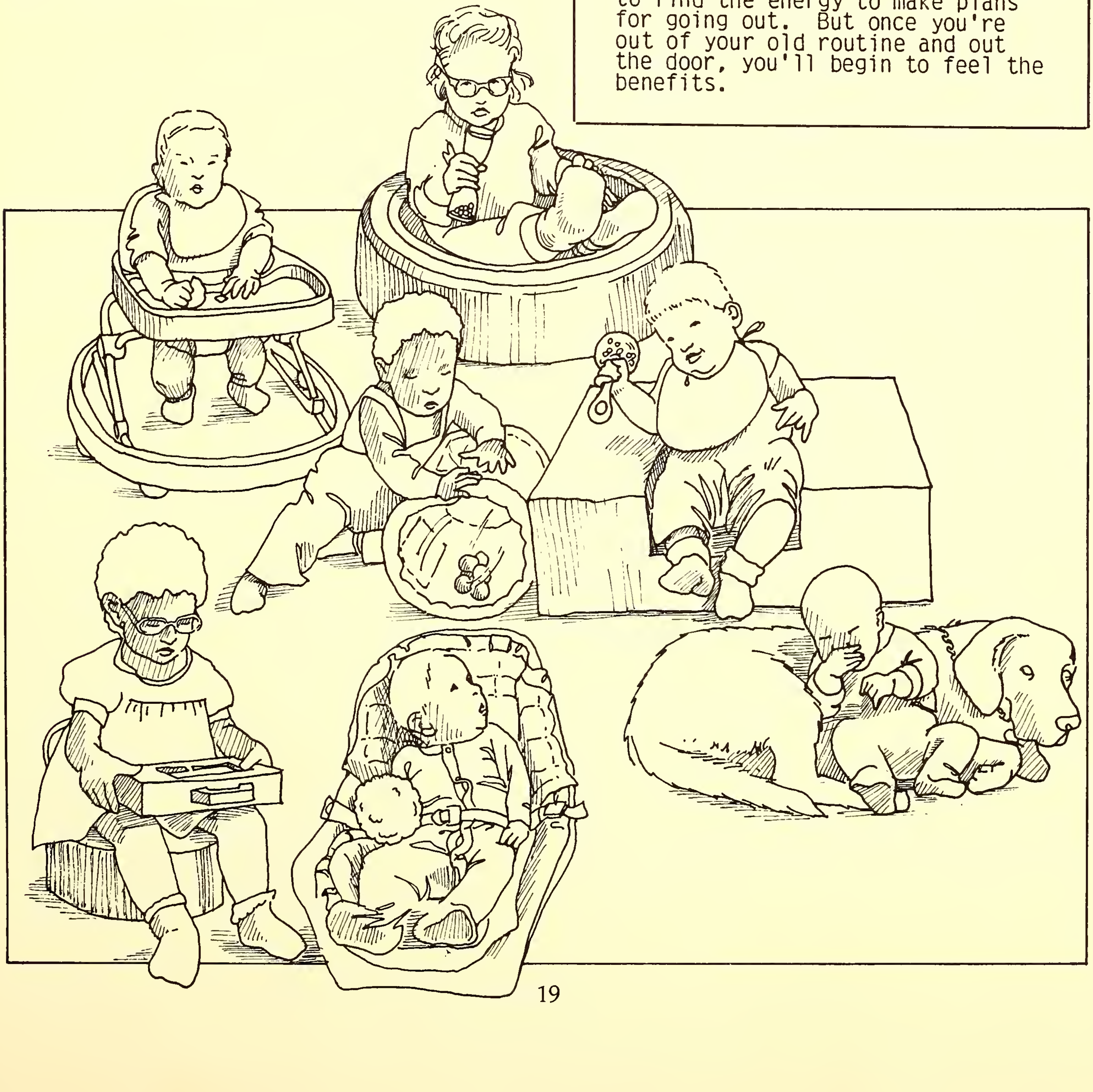
Selecting equipment. There are many kinds of equipment available to support babies and to help them develop upright posture and movement skills.

A bolster is a cylindrical cushion over which the baby can be placed. Bolsters may be used as positioning or mobility aids. A rolled towel may be used as a bolster to support a baby's position.

COPING STRATEGY

TAKE BREAKS

When you have very young children, it's difficult to plan to go out. However, it is well worth the effort of getting a baby sitter, getting food ready, and getting ready to go out. If you're feeling tired or depressed, it may be hard to find the energy to make plans for going out. But once you're out of your old routine and out the door, you'll begin to feel the benefits.



Some babies enjoy patting and rolling inflatable bolsters which contain balls and bells. Older infants may use a bolster to practice moving from sitting to standing or may push the bolster and crawl after it.

Some babies are able to sit but prefer lying on their backs. Low stools and small chairs may encourage them to sit. Babies with too much tone may find it easier to sit on a chair because the hip and knee flexion* breaks up the tone and inhibits extension*. The baby's feet should be flat on the floor. The sitting position is important because it frees hands for exploring objects.

Walkers are often used to get infants upright before they have the strength to do this on their own. Some physical therapists do not recommend the use of infant walkers. For some infants, walkers may interfere with the development of standing balance and walking with control. Walkers are now available with high, supportive backs, large trays and optional toy racks. Some infants may benefit from experiencing an upright position before they can maintain it themselves. This decision is highly individual. For totally blind infants a walker provides early independent mobility.

Broad-based, weighted push carts provide support and stability for infants who have prewalking skills but are delayed in walking independently. This provides the infant with independence, control, and the confidence to move out.

CHAPTER 5

SELECTED ROUTINES

This section describes common activities which occur in family routines: mealtime, playtime, bathtime, bedtime and going out. We have applied the main ideas and strategies of *Learning Together* to these familiar activities. Your infant learns by *doing* when he has a *reason* to participate. By participating in daily routines, your infant will be working on several skills during one activity.

For example, an infant learns many skills when he's hungry:

- In crawling or walking to a high chair, he is learning to orient himself in space and to increase his mobility.

- As he indicates he wants to get up into the high chair, he is learning to improve his communication.

- When he sits in the high chair and you put his bib on, he is learning that he is getting ready to eat.

- If you offer him two foods and let him make choices, he is learning how to identify and decide between foods.

- If you let him help with feeding, he is learning how to finger feed or use a spoon.

AND THE MEAL HAS JUST BEGUN!

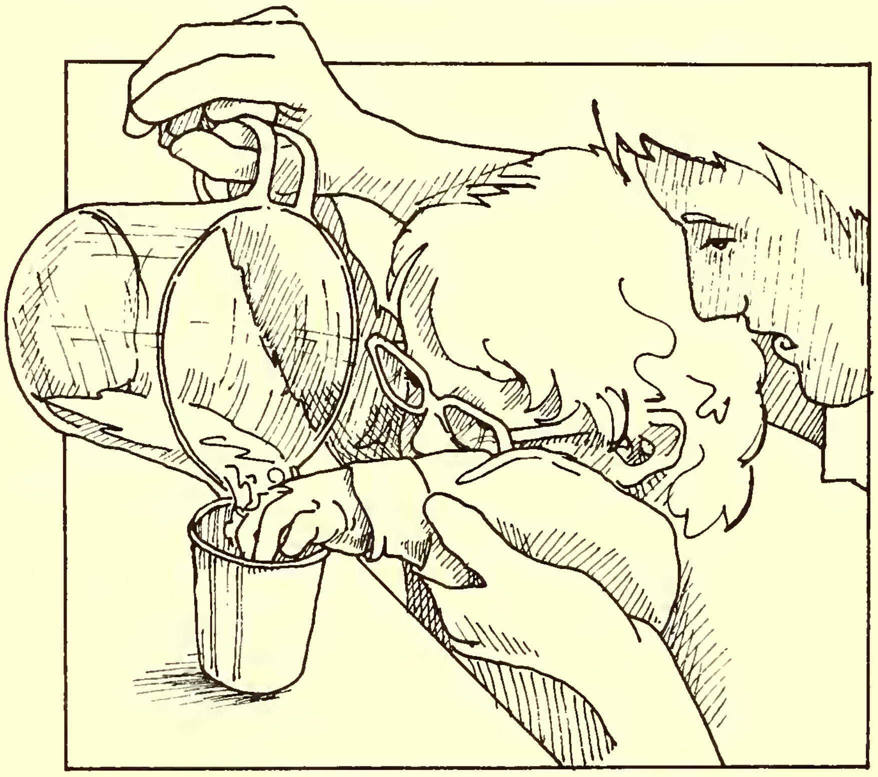
Remember it's impossible to do everything all the time, and that what you decide to work on is up to you. Don't attempt to try all our suggestions at one time, but select a few to try out and make your own changes.

MEALTIME

Setting the Stage

Your baby knows it's mealtime from certain cues--from a hungry feeling, a bib, high chair, or spoon, and from the delicious smells of food. She will soon learn that when you say "dinner time" it means that you'll offer food.

If your baby has other special needs in addition to a visual impairment, you may find it useful to check with your program for suggestions.



In order to identify what she's going to eat and where it is located, an infant with a visual impairment needs to touch the cup or bowl, stick a finger in the food or drink, and then take a taste. You can help by naming what's in the cup or bowl. You and your baby will have a more enjoyable mealtime if you're both in comfortable positions.

Scaffolding Strategies

Adapting materials: Certain foods and utensils will help introduce your baby to spoon feeding. Nuk trainer toothbrushes (see Resource List) may help in getting your baby to accept a spoonlike object in her mouth. Some babies like to mouth the "first" Nuk trainer toothbrush (dipped in a favorite food).

Begin with the baby's favorite foods that stick to the spoon, such as oatmeal or mashed potatoes. Sometimes spoons, bowls, and cups need a little adaptation for early use. Heavier spoons and spoons with built-up handles are easier to grasp than light ones with small handles. Try an infant spoon with a thick plastic handle, or insert a small handle into a tube of thick fabric. Some bowls have suction bottoms, or you can place some non-slip plastic like Dycem (see Resource List) under the bowl.

If you decide that you want to work on cup drinking, there are ways to encourage your baby to give up the bottle. First of all, you have to reduce the amount of liquid in the bottle. It's hard for most babies to go "cold turkey."

If your infant refuses to drink from a cup, and the natural reward of the drink is not enough, it helps to alternate sucking a bottle with sips from a cup. You may have to help your infant take sips. Soon, she'll learn the drink routine. "Three sips from the cup then I can suck on the bottle, yea!" Gradually decrease bottle and increase cup time.

For the baby's first cup, you may want to make a "U" cut in one side of a soft plastic cup like "Gerber's." The uncut side goes between the infant's lips. From the "U" cut side you can see when the infant has taken a drink; it's easier to tilt the cup, and the cup may be more acceptable to the baby because the edge won't touch her face.

There are times when some almost three-year-olds may need a bottle, when sick or very unhappy. There are also times when you may need to use a bottle, for example, in the car or when you cannot help hold the cup.

Older infants should be encouraged to hold onto the cup, pick it up, take a sip, and replace it. They need this simple sequence, especially if they cannot see the cup.

Providing feedback: Your infant needs to know that you're pleased with what she's doing. Your pleasure will motivate her. An infant with a visual impairment may not see your smile, but will hear the pleasure in your voice, and feel a happy pat or jiggle.

Pacing: Changing the timing of your voice and movements will keep your baby interested in using a spoon. For example, "Here-comes-the-spoon" or "Take-a-big-bite" (spoken slowly) and then "Yea, good-for-you" (spoken quickly).

Prompting: There are several kinds of prompts that may help your infant use a spoon:

- Verbal directions, e.g., "Pick up your spoon"
- Physical guidance...guiding the infant's hand to grasp spoon
- Tactile cue ... touching spoon to the infant's hand
- Auditory cue... tapping spoon on bowl
- Olfactory cue... holding spoon (with food) under infant's nose
- Visual cue... offering spoon
- Modeling... demonstrating holding and taking a bite off spoon, or taking a bite off spoon that the infant offers. To model for an infant who is totally blind, place her hands on your hand and mouth to feel you pick up the spoon and take a bite.

At first, your infant probably needs total physical guidance to practice scooping, getting the spoon to mouth, and then returning the spoon to the bowl.

Taking turns: When first learning to use a spoon, an infant needs practice with the scoop, take-a-bite and replace-spoon cycle. At first, you might alternate between physically guiding him through the spoon feeding cycle and encouraging him to feed himself. With your hand over the infant's, grasping the spoon, "I'll help you, scoop the oatmeal, take a bite, good job." Remove your hand, touch infant, "Now you do it." Some infants may still need physical help with scooping and replacing the spoon, but can get the spoon to mouth without help.

Expanding behavior: If you interpret feelings and behaviors for your infant, you give meaning to these behaviors. If you expand on what your infant says you provide a model of the next step.

Infant: Fusses and searches for spoon.
Parent: "Hurry up mom, I'm hungry, where's my spoon?"
Infant: Takes a big bite.
Parent: "Mmm, mashed potatoes are yummy."
Infant: "Dada"
Parent: "Daddy's at work, he'll be back for dinner."

Responding to behavior: Your infant will let you know when she's had enough to eat, needs help, or wants to take a drink. She needs to know that you've gotten her message although you may choose to coax one-more-bite or one-more-try.

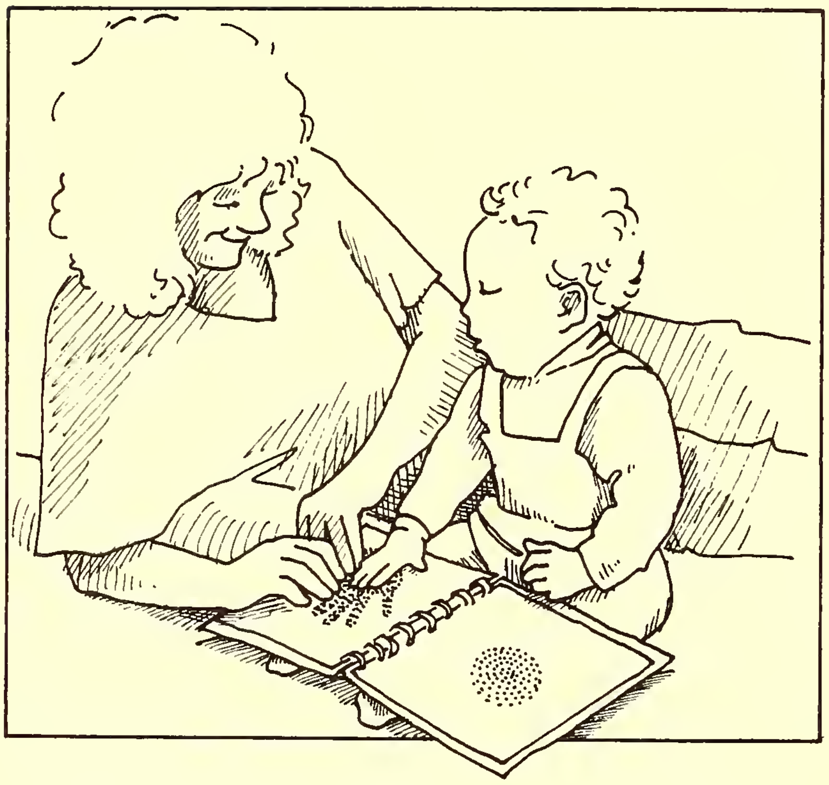
Marking the end of the activity: Your infant knows that mealtime is over when you say "all done," put things away, take her bib off, and take her out of the high chair.

Evaluating: How do think the mealtime went? Will you change anything the next time, introduce other foods, or give less help?

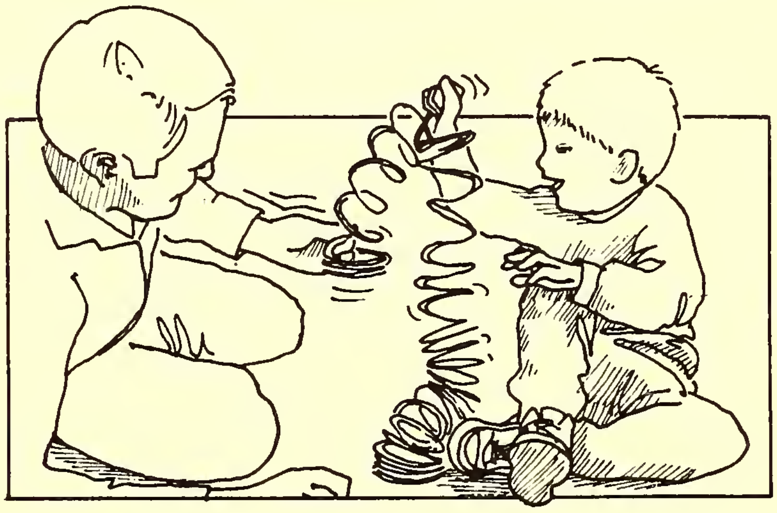
PLAYTIME

Setting the Stage

You can help your baby know it's playtime by going to a specific part of a room, or by using a special "play quilt," and by sounding playful. Say "We're gonna play" or "Come play with Mama" and your baby will learn that these words mean he's going to play with you.



Choose one or two toys to play with. It is important not to overwhelm the baby with too many toys all at once. At the other extreme, both of you might get bored if you never change toys. Offer a choice of toys and try new games with different toys. When showing your baby a toy, you need to name it and demonstrate how it works.



Scaffolding Strategies

Selecting materials: Babies need toys that are safe and easy to manipulate. They like toys that they can make *do something*... make a sound, change shape, go in something else. Real things and real experiences are lots of fun and very educational. Don't hesitate to use what's in the kitchen cabinet!

Providing feedback: If your baby cannot see your proud, beaming face, you must let him know through your voice and touch that you are very pleased: "You did it, big boy," "Yea, that's great." Your baby also needs feedback which corrects or guides manipulation of a toy: "Feel over here (tap the button); this is the button" or "You've got it upside down. Let me show you how to turn it so it will work" or "Don't push that in; it will break."

This type of feedback corrects and guides the baby's actions. It is more helpful to tell the baby what to do than to criticize his actions. No one likes to be criticized, including babies.

Pacing: When you see your baby losing interest, you might change what you do with the toy or switch to a new toy. For example, you can use the toy to play "I'm gonna get you," or you can change the timing of a song by how you turn the handle of a music box.

Prompting: You may have to encourage your infant's first attempts to manipulate objects. Here are some prompts you might use:

- Verbal directions, e.g., "Bang the xylophone, make music"

- Physical guidance... guide the infant's hand with the stick and hit the xylophone

- Tactile cue... touch the stick to the infant's hand

- Auditory cue... tap the xylophone

- Visual cue... offer the xylophone and/or stick

- Modeling... demonstrate hitting the xylophone with the stick

Taking turns: Playing with objects is a natural time for taking turns.

"... you bang the floor, then I bang the floor, you..."

"... you play the xylophone, then I play the xylophone, you..."

"... you roll the ball, then I roll the ball back to you..."

Expanding behavior: It is important to interpret infant signals, and to "speak for" the baby.

Infant: Fusses and throws toy.
Parent: "I'm sick of that one, Dad. What else is there?"
Infant: Laughs
Parent: "Whee! That's fun!"
Infant: "Ba" and reaches.
Parent: "I want the ball, Mom."

Responding to behavior: Your baby will let you know when it's time to change toys or games, or to stop playing altogether. Sometimes you may want to keep playing. You may want to show your baby something new and fun to do. When it is clear your baby has had enough, respect and respond to these signals and move on!

Marking the end of the activity: When it's time to end playtime, say "All done. Time to put the toys away." Involve him in the clean-up of the play area.

Evaluating: Will you use different toys the next time? Give more or less help in manipulating them? Or do you think you need to keep things the same for now?

BATHTIME

Bathing is a particularly enjoyable learning opportunity because most babies like water. During bathtime your baby learns many things: dressing, language and play skills. If you typically bathe your baby at nighttime, she'll begin to anticipate the sequence of events: bathe in the tub, dry off, get hugs and kisses from Mommy and Daddy, then go night-night with a familiar toy or blanket.

Bathing offers a natural way for a baby to learn the names of body parts, to understand relative size, and to develop a self-image.

Some parents enjoy bathing with their infants. Bathing with Mommy or Daddy or brother or sister is one of the few natural situations for a totally blind child to learn gender differences.

Setting the Stage

Running the water in the tub and getting undressed are the natural cues that bathtime is about to begin.

Positioning: You might prefer bathing your infant in the kitchen sink when she is very small. It offers a secure position for the infant. You can place a towel, sponge or plastic support on the bottom of the sink to prevent slipping and sliding.

If your baby is fearful of water, you may want to put the baby in an empty tub for a sponge bath and gradually introduce water. Your baby might feel more secure on a sponge insert or in a smaller tub. If your baby has very special needs, consult with your program about infant seats or other special equipment for bathing.

Naming and describing: Remember to prepare your baby for what is about to happen by saying:

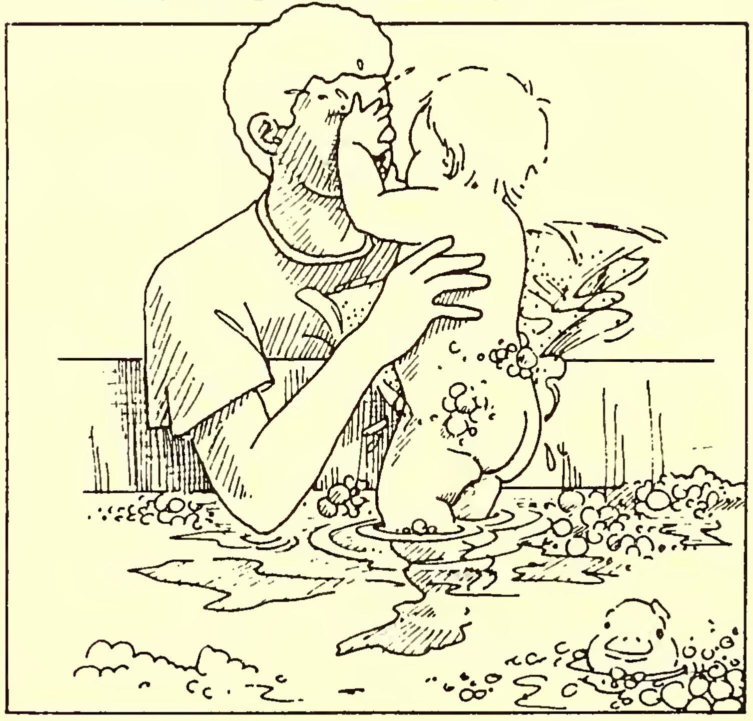
> "It's bathtime."
> "Let's get undressed."

Before placing your baby in the bathtub, let him feel the water.

> "Oh, the warm water feels so good; lets get in."

In the bathtub, name the soap, washcloth, and parts of the body as you wash them. Take time to have fun:

> "Whee, doesn't that feel good?"
> "Oh, you splashed Daddy!"



Scaffolding Strategies

Selecting Materials: Once in the tub, give the baby some time to explore what's there and to become comfortable with being in the tub. Then you can show your baby other things to do. Encourage patting the water; make little splashes.

Rub soap on your baby's hand and help her rub her other arm or tummy. Use a soap on a rope to help an older infant locate the soap. The infant can help wash himself with a sponge or wash cloth mitt.

Infants love to practice pouring, splashing, squeezing, pushing, and tasting in the bath. Provide plastic toys, sponges, containers to encourage this exploration. Infant bubblebath, mild crayon soap, food coloring (a few drops in the water won't stain the baby), naturally-scented soaps (almond, coconut) and flavor extracts (peppermint, lemon) will add smells, colors, and bubbles.

Providing feedback: Let your baby know by your facial expressions, voice and touch that you're pleased with what he's doing. Comment on your baby's actions in the water: "Good, you washed your leg"; "Oh, you splashed, you're getting Daddy wet."

Pacing: Match bathing and water play movements with what you say, and how you say it.

> "Splash, splash."
> "P-o-u-r the the water out!"
> "I'm washing your hair, rub, rub, rub."
> "Get those toes, this little piggy" (wiggle toes).

Taking turns: Water play and other bathtime activities are natural opportunities for taking turns:

> "You rubbed this leg, now I'll wash your other leg."
> "Your turn. Pour the water out."

If your baby is bathing with you or a sibling, take turns:

> "You wash daddy's big feet. That tickles!"
> "My turn. Got your feet."

Expanding on behaviors: Add new models to what your baby does and says.

Expand vocalizations:

Infant: "Ba"
Parent: "Get those bubbles."
Infant: Pats the sponge
Parent: "That's the sponge. Let's squeeze it."

Provide language to build concepts as situations occur, for example: float/sink, empty/full, warm/cold, wet/dry, big/little, clean/dirty.

Responding to behavior: Watch your baby's cues for when he's had enough. In the beginning, bathtime may be relatively brief.

Marking the end of the activity: When the infant is older, show her how to pull the plug and talk about the water draining out of the tub. Getting out of the tub and drying off with a towel will signal that bathtime is over.

Evaluating: Is there anything you'll change about bathtime?

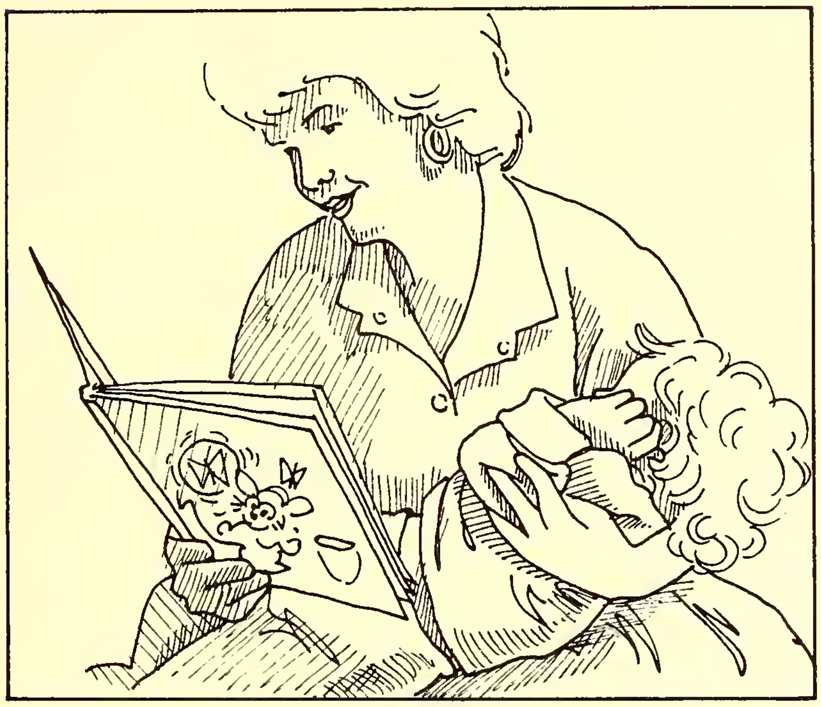
Other Ideas

If you and your baby enjoy bathtime and water play, you might enjoy an infant or family swim class at a local pool. Most babies enjoy swimming because they can overcome the problem of gravity and move their bodies in a very different way than they can on dry land. Early introduction to swimming can prevent a fear of water which some children may develop later.

BEDTIME

Setting the Stage

Your infant knows it's bedtime by the daily schedule (right after supper, bath, or a story), getting pajamas on, and darkness (if he or she has some vision). Bedtime will be smoother and easier if you have a clear and predictable routine of activities leading up to bedtime. These activities should include a relaxing, quiet time, like a bath or a story, rather than rough-and-tumble play. As you talk about "bedtime," your baby begins to associate this word with getting into pajamas and getting into a cozy bed.



Scaffolding Strategies

Adapting: If your baby has sleep difficulties, ask yourself these questions:

(a) Is she comfortable? In pain? Too warm or too cold?

(b) Is she tired? Too much napping?

(c) Is she too wound up? Too much rough-and-tumble play?

(d) Is she afraid of something? What happened before bedtime or last night?

Selecting materials: Some babies have favorite objects for bedtime. For example, a baby blanket or stuffed toy may provide comfort and help with naps and nighttime. Babies often choose objects based on their textures. Some babies enjoy soft music or wind-up mobiles as part of going to sleep. It's difficult to keep blankets on babies; sleep sacks or pajamas with feet keep babies covered and warm. Special crib equipment (see Resource List) may help soothe restless babies back to sleep.

If your baby climbs out of or stands and jumps in a crib, you might have her sleep on a mattress on the floor for safety reasons.

Providing feedback: Quiet songs and lullabies may be soothing. Some babies like to have their backs rubbed or patted gently as they go to sleep. When your baby cries in the night, give her a chance to soothe herself back to sleep. Self-soothing is an important skill. Some babies calm themselves by sucking on their fingers or pacifiers. You know your baby and will know when you need to soothe her back to sleep. It may help to pat your baby on her back and say "It's nighttime, time to sleep" in a quiet and matter-of-fact way. Scolding and shouting may make it even more difficult for her to go back to sleep.

Pacing: Bedtime sounds should be slow, monotonous and soothing. If a baby cannot see, she won't know that darkness means it's time to sleep. If you keep nighttime sounds soft and soothing, the baby will learn that it's time to slow down, lie down, and sleep.

Evaluating: Is there anything you need to change about the bedtime routine?

GOING OUT

Your infant learns about the outside world by going out with the family. Early outings may be in the back yard, next door, down the road, to a doctor's office, or visiting relatives and friends.

Traveling provides new sensations: the sounds of traffic, children, dogs; the smells of grass, flowers, a bakery, gasoline fumes; the feeling of sun, wind, mist or snow. Be sure to describe what you think your baby is noticing: "That was a loud bus."

Visiting other homes gives an infant the opportunity to experience different smells, sounds, objects, people, and places, and to compare them with those at his home.

Setting the Stage

Getting dressed with hat or coat, getting into a carrier, stroller, or car seat "sets the stage" and prepares a baby for going out. A baby learns that these signals and certain words mean "going out."

Selecting where to go: At first, some parents may dislike explaining about their infant's visual impairment. If you are nervous about going out with your visually impaired infant, make first visits to friends with whom you feel comfortable. Some people are more accepting of differences than others. Make an easy start. When you feel ready, you'll be able to take your baby to less familiar places. Once you feel ready to venture into the public-at-large, choose an activity that is brief and enjoyable, like going for an ice cream.

Places with large crowds and open spaces can be overwhelming for infants who are visually impaired. Noisy, unfamiliar settings are too much for some babies. Don't be discouraged by this first reaction. Your baby will become more comfortable as the place and activity become more familiar. The first trip to the ocean is upsetting for some babies. Perhaps they are bothered by the open space and sounds of the waves. You can prepare your infant for "big water sounds" by playing in the tub and in wading pools at home, and then, by trips to a stream or lake.

Naming and describing: Before your baby understands what you say, she will understand your walk routine. She will anticipate a sequence of events and form a mental map of "going for a walk." It's not possible to always describe everything on a walk. You may want to select a few of these ideas to try.

In many ways you are your infant's tour guide:

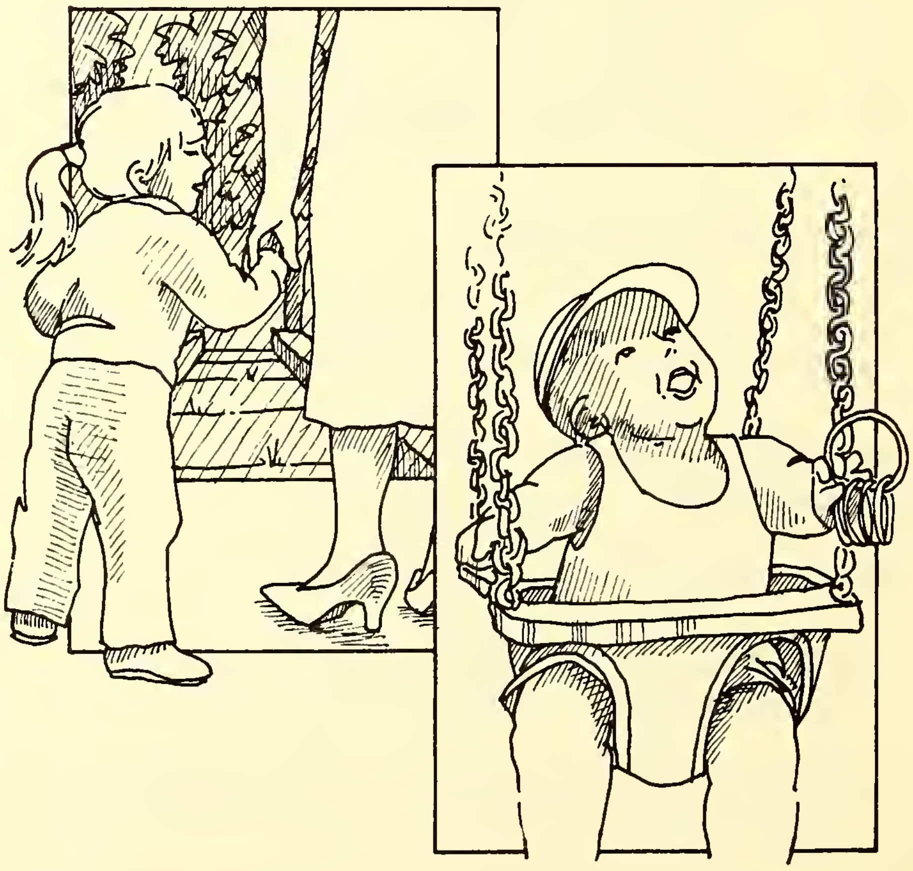
You prepare your baby for the excursion...
"Let's get ready to go to Nonny's house."

You make certain your baby is appropriately dressed...
"Let's put your hood up; it's cold."

You choose the route...
"I think we'll walk through the park today."

You point out landmarks...
"Here comes the bumpy part of the sidewalk."

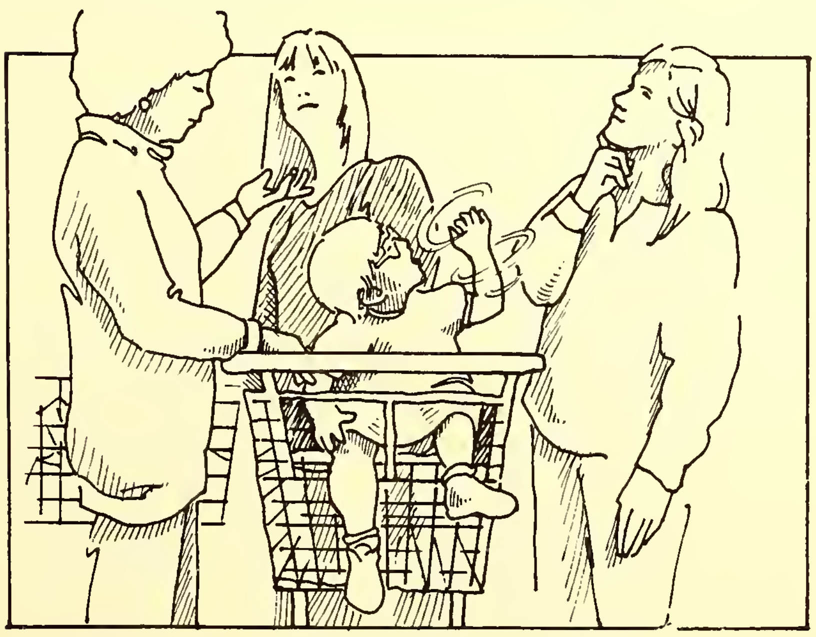
You interpret sounds...
"Those swings are so squeaky."



Other Ideas

Riding in the car: Car rides usually soothe a fussy infant and may put him to sleep. As your baby gets older, riding in the car may be boring compared to going for a walk because he may not be able to see out of the windows, and sounds and smells are more remote. To keep your baby entertained, talk to him, sing songs, explain sounds, and provide toys to keep his hands busy. A basket of favorite toys with interesting textures will help keep your baby happy and may discourage eye pressing or other forms of self-stimulation.

"Supermarket Syndrome"--unsolicited questions, comments and advice from the public. Reactions, questions and comments from strangers make us feel awkward and uncomfortable. Standing at the supermarket check-out counter is a likely place for strangers to ask questions about your baby. Comments can range from kind and sensitive to shockingly rude. A common question is "What's wrong with her eyes?" No parents welcome questions about "what's wrong" with their baby. After a period of feeling angry or sad, most parents realize these situations will occur, and they prepare responses, usually a brief, matter-of-fact statement. Brothers and sisters also learn this skill. A seven-year-old sister came up with a response that the whole family has adopted: "She can't see as well as you or me, but she sees as well as she can." Another family responds: "He can't see with his eyes, but he sees with his hands and his heart."

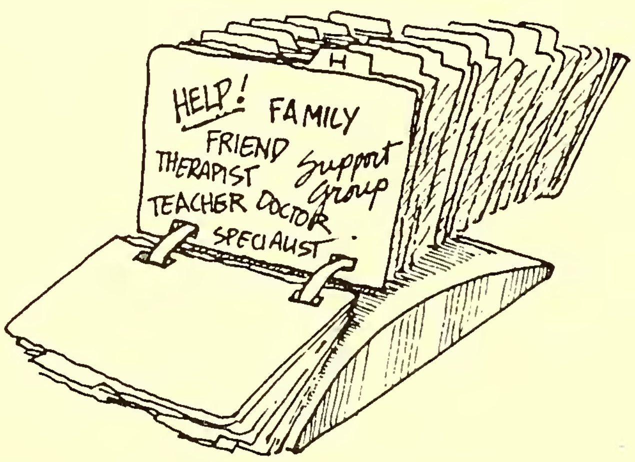


Your responses provide important models for your infant. He'll get questions about his visual impairment throughout his life and will need to develop strategies for dealing with them.

Parent-infant community programs: When you're ready, you may want to consider going to community activities for parents and toddlers, such as parent education classes, play groups and family swim activities. These programs are designed to promote an infant's social and physical skills in a parent-supported, child-centered environment. These are opportunities for infants to interact with peers and for parents to discuss common interests such as infant care and development. In play groups, infants can practice many skills which will prepare them for preschool. Many parents prefer going to these activities with a friend who also has an infant.

COPING STRATEGY

HELP!



Find and use help
Knowing when to find and use help is another sign of coping. It's a big job and it is lonely to work by yourself. It's important to evaluate help, and to change it, based on your needs and experience.

CHAPTER 6

WHAT WE KNOW ABOUT HOW VISUAL IMPAIRMENT AFFECTS DEVELOPMENT

The purpose of this review is to summarize what is known about the early development of visually impaired infants, and to emphasize the need for early intervention. However, all visually impaired infants are different, so don't assume that these findings will be true for your child. Only a very small percentage (less than 1%) of infants are born with visual impairments. Most studies involve a limited number of babies (Ferrell, 1986) with varying causes, types, and degrees of visual impairments. Some of these babies have additional problems. No two babies or their learning environments are exactly alike.

Approximately 50 to 70% of children with visual impairments have other special needs (Fine, 1979; Jan, Freeman, and Scott, 1977). When a visual impairment is combined with other disabilities, it is very difficult to identify the exact effects of vision loss on development.

We cannot predict exactly how and when any visually impaired infant will develop certain skills. We can only use research findings and other available information as a basis for meeting infant needs, for helping overall development, and for providing meaningful learning experiences.

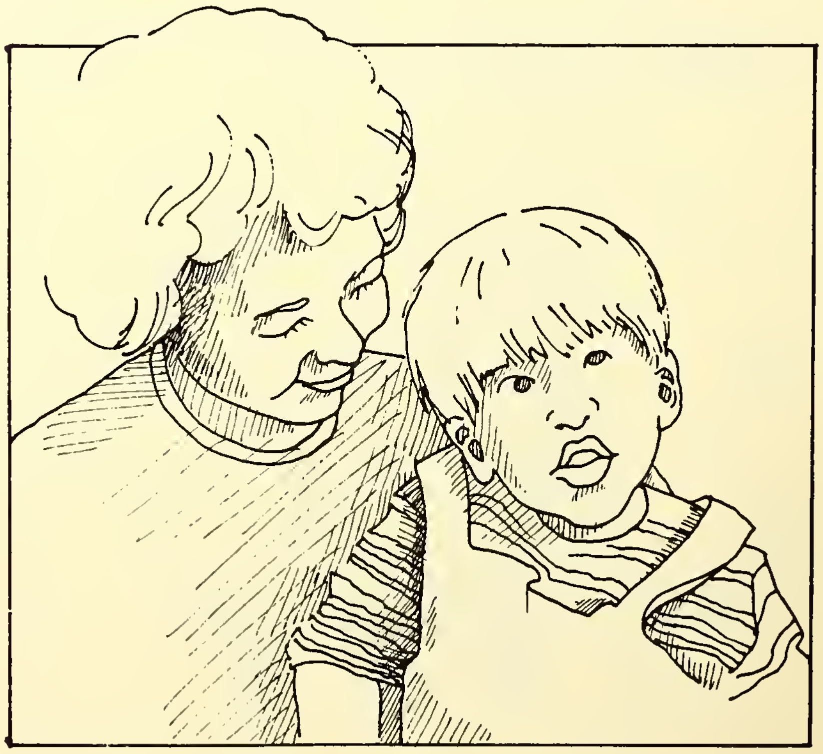
We know the timetable for skill development in sighted infants varies widely, so we might expect even greater variation in the development of infants with visual impairments. Some sighted babies walk at 8 months and others at 15 months. Some totally blind infants begin to walk at the same time as sighted peers, but most walk at a later age.

Face-to-Face Interactions

Eye contact is very important in our social interactions and relationships. We use gaze as an indication of attention. Babies are able to control the direction in which they look and to shut out visual input by closing their eyes. These behaviors guide our interactions with babies (Brazelton, Koslowski & Main, 1974). When a baby looks at parents, the parents want to respond by looking back, talking or smiling to the baby (Robson, 1967; Wolff, 1963).

Parents of visually impaired infants have to recognize other signals of their baby's interest and awareness (Fraiberg, 1977). These infants become very still when parents talk to them; they are listening. This quiet attention is sometimes misinterpreted as a lack of interest. These babies may initiate few interactions because they cannot see that their parents are available and responsive. This means that parents will have to take the lead. Some researchers have found that it is difficult for mothers to talk to quiet infants who don't look at them (Rowland, 1984).

Infants smile more readily at things they see; they do not always smile at sounds or noise (Freedman, 1964). Parents of visually impaired



infants have discovered that tickling and rough-and-tumble play will usually produce smiles and laughter (Fraiberg, 1974). Physical movement and tactile stimulation are "scaffolds" or cues for getting an infant to smile. Despite many challenges, these parents and infants discover exciting solutions for playing, laughing, and living together. Parents learn to read subtle signals and to engage their infants in enjoyable and satisfying ways.

Communication

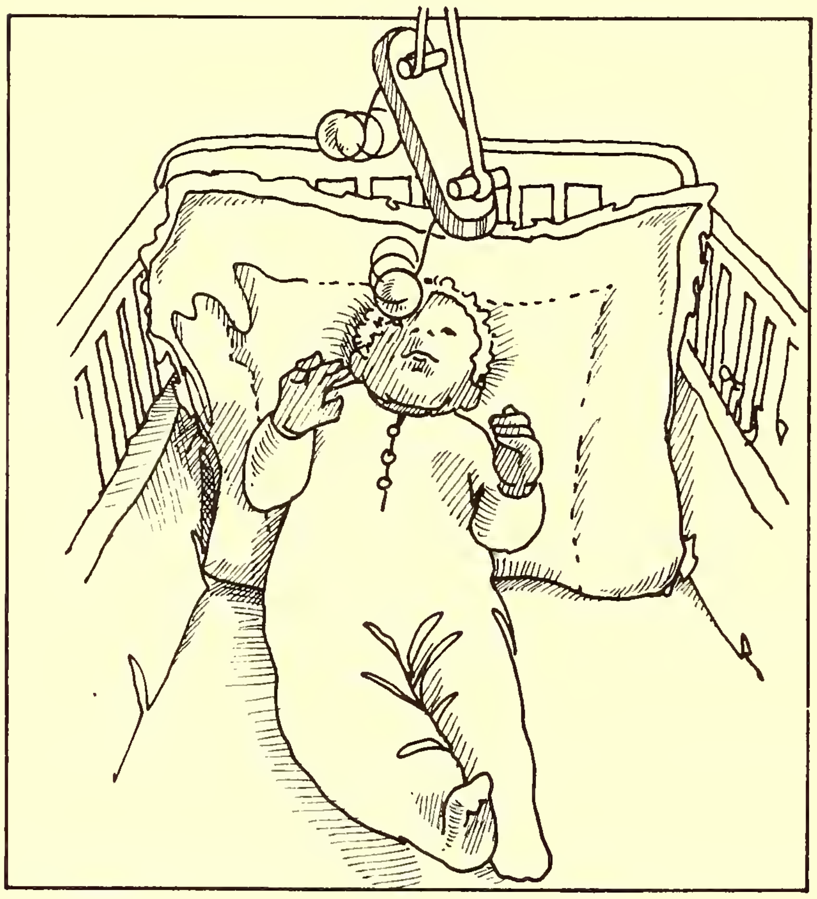
Researchers now believe that early social interactions and parent-infant games, or preverbal conversations, help or scaffold language development (Bates et al, 1982; Ratner & Bruner, 1977). By playing with their parents, babies practice how to pay attention, how to take a turn, and how to begin a conversation.

With little or no vision, engaging in some types of preverbal conversations may be a difficult task. However, some parents play vocal imitation, physical movement, and naming games which provide their infants with practice in preverbal conversational skills (Chen-Bremer & Franklin, 1984). Later on, some visually impaired children need help in developing socially appropriate speech (Rogow, 1983; Urwin, 1984).

Cognition

Reaching for an object that's seen and the beginnings of grasp usually emerge around four months of age. At an early age, babies who are totally blind will reach for and grasp objects which have touched their hands. However, they do not reach for sound-making objects until between 6 1/2 and 11 months of age (Fraiberg, 1977). Reaching for what is heard is more complicated than reaching for what is felt or for what is seen. Infants do not reach consistently on sound cue alone before 10 months of age. This is true of infants who are totally blind (Fraiberg, 1968) or sighted (Bower & Wishart, reported in Bower, 1977).

In order to search for an object which is out of sight or touch, an infant must have object permanence*.



Piaget (1954) has described how sighted infants attain object concept*. They learn how to recognize, use, and classify objects through a process of observation, trial and error, and manipulation. A visually impaired infant's immediate world may be limited to what is within arm's length. Infants who are totally blind must develop object concept in a roundabout way. These babies must first understand that objects exist beyond their reach and that a sound indicates the existence of an object. Because they need more time to develop object concept through tactile and auditory information, these infants may take more time than sighted peers to achieve some cognitive milestones.

Locomotion

Although infants who are totally blind will usually attain certain motor milestones at the same time as sighted peers, they do not usually crawl and walk as early (Adelson & Fraiberg, 1974). These babies first need to have object permanence and know there is something to move toward.

Other babies will need physical therapy to help low muscle tone. Some visually impaired infants are hypotonic, and their low tone interferes with motor development (Jan, Robinson, Scott & Kinnis, 1975; Hart, 1984).

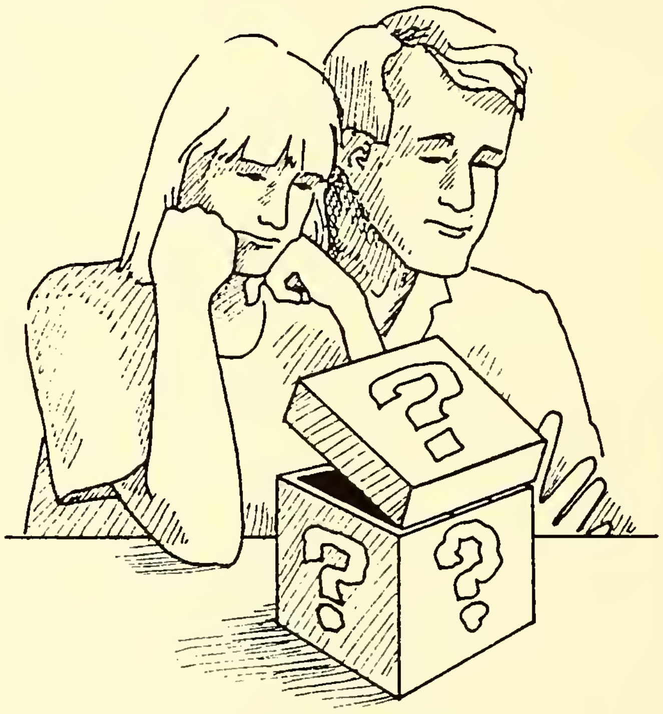
Babies with visual impairments may be unwilling or unable to move out into unknown space. They may need to be encouraged to explore. They will become more interested in exploring once they know more about what's out there.

Differences Between Totally Blind and Low Vision Infants

Although total blindness is rare, there have been more studies on the development of young children who are totally blind than on those who have some residual vision*. These studies typically compare children who are totally blind with those who are normally sighted. One study has specifically compared the development of children who are totally blind, partially sighted*, and normally sighted. Using a standardized developmental scale, Reynell (1978) found that young children with some functional vision were more similar to totally blind than to sighted peers in their developmental schedules. However, they attained many developmental milestones earlier than children who were totally blind.

COPING STRATEGY

NOT KNOWING



To be able to handle "not knowing"

It's difficult not to know. It's more comfortable to know what's going to happen and to have control. Aspects of the future are unknown. The ability to deal with uncertainty is an important coping skill.

CHAPTER 7

COMMON QUESTIONS FROM PARENTS

Current concerns

Q: What kinds of toys should I buy?

Toys that provide feedback about your baby's actions are good. The youngest baby will enjoy things that can be grasped and mouthed. Next, babies like toys which they can shake and bang. Later, infants become interested in container play, then in pulling things apart and putting things together. Finally, infants are interested in play activities related to their language level, such as playing with dolls, listening to stories, and singing songs.

Q: My baby reaches directly for toys but his ophthalmologist said he doesn't have stereoscopic vision. I thought that meant he wouldn't have depth perception*?

Stereoscopic vision refers to the ability of the eyes to work together, the physiological basis of depth perception. Your baby is learning about distance by reaching for objects. His reach has become accurate with practice. A baby learns about depth as he understands about the size and position of objects and as he uses sound cues to judge distance (loudness of a sound is related to distance from an object).

Q: My three-year-old says that his sister will be able to see when she is big like him. What do I say?

A three-year-old is saying what he's hoping will be so. This is magical thinking. First, respond on a feeling level and set the stage for questions.

Example

Parent: I know you wish that Susie could see like you and me. She can see your face when it's very close. Are you wondering about how your sister's eyes work? Do you think they might hurt?

Q: How can I tell what developmental delays are caused by David's visual impairment and what may be due to other problems?

There is no simple answer to this question because every child is different. Some behaviors are part of David being an infant and due to his individual personality; some will be due to his visual impairments and some delays will be caused by his other problems. It's difficult to sort out what is caused solely by his visual impairment.

Q: Janie has a hearing loss in addition to her visual impairment. Will sign language interfere with her speech development?

It's very important for Janie to have an early means of communication. By using signs, you'll be giving Janie a way to communicate and a basis for language development.

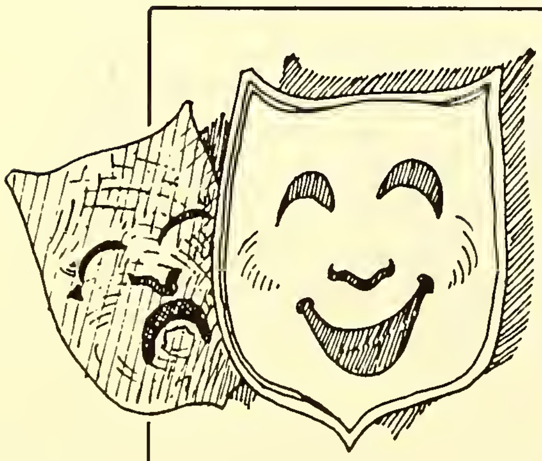
It's easier for a baby to make signs than to say words, and Janie will recognize your signs before she understands your spoken words. Also, Janie's signs will help us understand what she is trying to say. There is no evidence that sign language interferes with speech development. However, at first it's difficult for children to talk and sign at the same time. Children tend to use the most efficient way of getting a message across.

Q: Mary will only accept pureed foods. When should I introduce solid foods?

Some visually impaired infants reject solids when first introduced. It helps to gradually increase the texture of foods. Some babies will accept scrambled eggs, or peas in mashed potatoes before they will try bits of meat. If there are no medical or physical limitations, solid foods should be introduced to a visually impaired infant at the same age as to a sighted baby.

Q: Should I encourage Linda to pick food up with her fingers? She'll hold a spoon and eat anything that's on it, but she won't hold a cracker or other finger food.

Some visually impaired infants do not like to touch different textures. However, it's important to encourage finger feeding. A baby can finger feed independently before she can spoon feed alone. Picking up small bits of food helps a totally blind baby to develop hand search and grasp skills. If a baby has some residual vision, she will be learning to search visually, to coordinate her eyes and hands, and to grasp small things.



COPING STRATEGY

HUMOR

Sense of humor

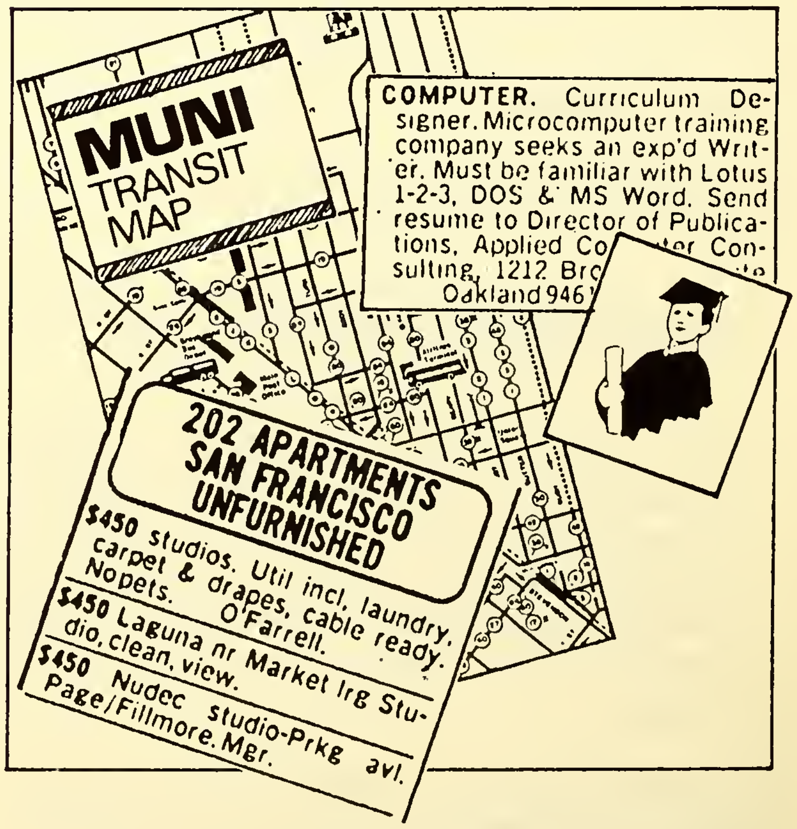
Being able to laugh will help in difficult situations. This is not disrespectful or insensitive, but relieves stress, and helps you to feel better.

Q: When should I begin toilet training?

Usually, a child is ready to be toilet trained when she is dry for long periods and when she shows some awareness of a wet or soiled diaper. The exact age when you introduce toilet training will depend on your infant's needs, family values, and your priorities.

Q: How can I get him to mind me?

Parents of children with special needs may feel guilty about setting limits. They may wonder what is a reasonable expectation for a child with a disability. First, make sure your expectations are developmentally appropriate. It helps to emphasize the positive, to be consistent, and to set clear limits for yourself and your baby.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UNFURNISHED
$450 studios. Util incl, laundry. Carpet & drapes, cable ready. Nopets. O'Farrell.
$450 Laguna nr Market lrg Studio, clean, view.
$450 Nudec studio-Prkg avl. Page/Fillmore. Mgr.

Concerns about the future

Q: Won't Jamie be teased if he goes to a regular preschool?

Teasing is part of going to school. All children face some form of teasing. This is part of learning how to live in our society. You can help your child deal with these painful times by listening with empathy, and by talking about his feelings. There are various ways that teachers and parents can help children understand about handicapping conditions, and ways to help a child respond to and cope with teasing.

This type of response shows understanding about the child's feelings and will help him learn to cope with teasing:

Five-year-old: "Johnny said I'm so dumb I can't even see."
Parent: "Boy, you look sad about that."
Five-year-old: "Yea, and I'm mad too."
Parent: "Well that's understandable. It makes you mad when someone hurts your feelings. Sounds like Johnny really doesn't understand some things about seeing and the ways people feel."

This type of response ignores the child's feelings and will not help him learn how to cope with teasing:

Parent: "Cheer up, let's have a cookie and then we'll go shopping for a toy to make you feel better. I'll talk to Johnny's mother."

The following example shows that it's difficult not to take reactions to your child personally:

Three-year-old to visually impaired peer: "How come your eyes are funny looking?"
Peer: Doesn't understand question. Walks away.
Parent: Bursts into tears or gets angry.

One of the difficult tasks of parenthood is to separate your own feelings from those of your child.

Q: When should John learn braille?

There are really two questions. First, will he need braille or will he be able to use large print? Secondly, if braille is needed, when should it be introduced? For low vision* children, there are many optical aids and computer programs to help with reading. Children who are blind learn to read braille when sighted children learn to read print. Early discrimination of toys, objects and other sensory motor experiences are "prebraille" experiences. You can interest your child in reading by reading to him.

Q: Will Mary need to go to a special school?

There are many types of educational settings for children with visual impairments. Services range from placement in a regular class with support services, to a resource room, to a special day class, to a residential school. Where your child goes to school will depend on family values, child needs, available programs, and the particular situation. However, parents participate in the decision-making process and make the final decision.

Q: Will John graduate from high school?

Public schools are required to provide academic support services for students who are visually impaired. Graduating from high school will depend on many things. Some children will be able to meet academic requirements without difficulty. If necessary, there are different ways to fulfill high school requirements.

Q: When will Lucy need a cane or a dog?

Learning to use a cane involves training from an orientation and mobility specialist*. Public schools are required to provide orientation and mobility services to students who are visually impaired. Children are usually about three years old when they learn to use a cane. They have to be older to use a guide dog, around 16 to 18 years old. Owning a guide dog requires maturity and endurance.

Q: Will Jamie be able to drive when he grows up?

We have to wait and see what happens with Jamie's vision. Vision may become more functional with development. Whether or not driving is feasible, most teenagers want to drive. However, people who are legally blind* do not usually see well enough to pass the vision test. It's important at that time to explore areas for gaining independence (sports, hobbies) and for fostering self-esteem.

Q: Will Arthur be able to support himself and live independently?

These are questions that we can't answer when a child is an infant. Early intervention is geared to help the child's development. Self-help and vocational training are part of a program from an early age. There are many jobs which a visually impaired person can perform. For those who are unemployed, there are many community support services: group homes, companion living, homemaker aides, and supported employment programs which are designed to support the independence of adults with special needs.

Q: Will Jimmy's children be visually impaired?

That depends on the cause of his visual impairment. If you think his visual impairment might be hereditary (runs in the family), you need to consult a geneticist (a medical doctor who deals with diseases that run in the family).

Q: Will Cindy be able to discriminate money?

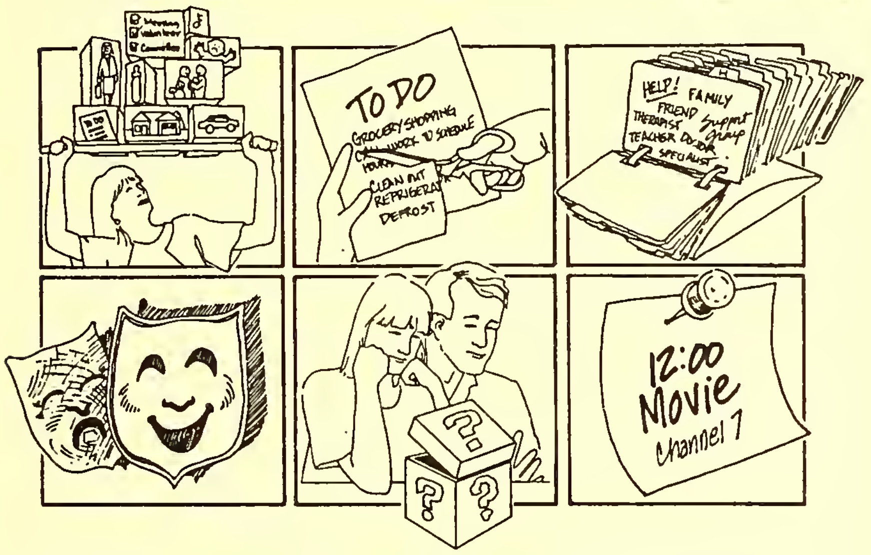
Coins are easy to discriminate by size. People who are visually impaired learn to fold bills so they can discriminate them, to trade with people they trust, and develop other ways of being independent and knowledgeable consumers.

Q: Will people take advantage of Steve because he is blind?

All parents are concerned when a child moves out from their direct supervision; even more so when the child has a disability. This is a natural part of letting go. The best preparation that you can give is to help your child learn ways of living safely in the community. Be sensible and try not to be intrusive. Community support services can provide help with safety issues.

CHAPTER 8

COPING STRATEGIES



Learning Together incorporates these strategies:

1. **Know and respect your limits.** Know what you are and what you are not able to do. This is a sign of strength, not weakness. To do otherwise may lead to exhaustion and to feeling overwhelmed.

2. **Take one step at a time to complete a big task.** Cut each task or list of things to do in half and then divide by two. This way you will have control over what needs to be done, and you'll be able to complete a task. If you have a large goal (e.g., clean out refrigerator), define the steps and do only a bit at a time.

3. **Find and use help.** Knowing when to find and use help is another sign of coping. It's a big job and it is lonely to work by yourself. It's important to evaluate help, and to change it, based on your needs and experience.

4. **Have a sense of humor.** Being able to laugh will help in difficult situations. This is not disrespectful or insensitive, but relieves stress, and helps you feel better.

5. **Be able to handle "not knowing."** It's difficult not to know. It's more comfortable to know what's going to happen and to have control. However, aspects of the future are unknown. The ability to deal with uncertainty is an important coping skill.

6. **Take breaks.** Plan small breaks at home as well as larger breaks that involve going out. Small breaks at home may be just relaxing, having a cup of coffee, watching TV, or reading a magazine. When you have very young children, it's difficult to plan for going out. However, it is well worth the effort. If you're feeling tired or depressed, it may be hard to find the energy to make plans for going out. But once you're out of your old routine and out the door, you'll begin to feel the benefits. It takes practice to take breaks because there are always things to be done.

Coping Strategies were contributed by Cathy Callahan Groves (adapted from Caplan, 1960,1964).

CHAPTER 9

INTRODUCING SIGN LANGUAGE

If you decide to use sign language with your infant, these are some ways to introduce and adapt signs for a visually impaired baby who has a hearing loss:

Selecting first signs. Begin with signs that are:

Useful
- you need to use them a lot, e.g., EAT, DRINK, UP, DOWN.

Motivating
- your baby is interested in what they mean, e.g., toys, foods and favorite activities.

Easy to make
- signs which touch a part of the body, e.g., MORE, MAMA, BATH, HUNGRY, FOOD.

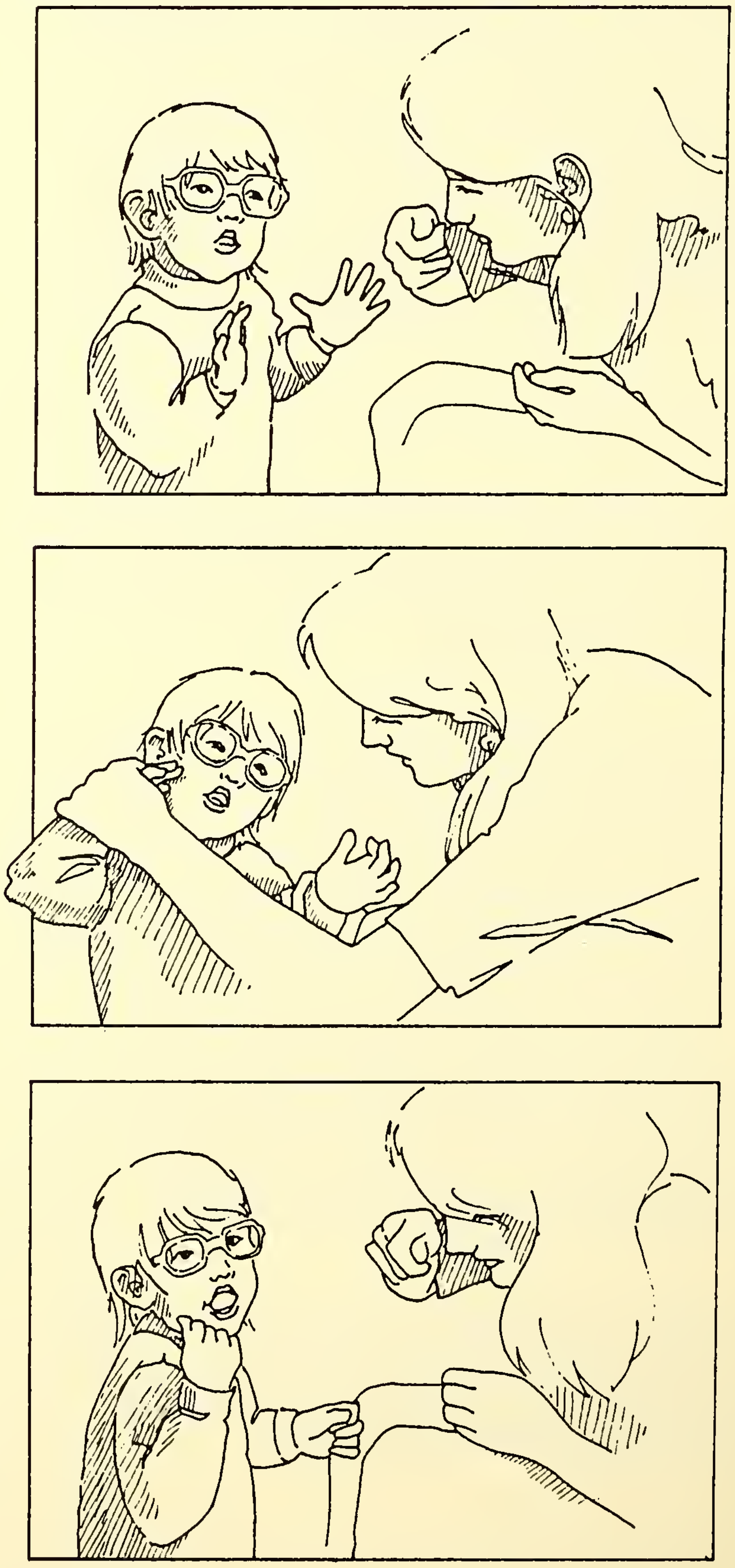
Easy to understand
- signs which look like or feel like what they mean, e.g., EAT, DRINK, COMB.

Adapting signs. If you are using sign language, it helps to use one of the following strategies to help the baby understand the meaning of a sign:

- Make the sign on the baby's body.
- Make the sign with the infant's hands.
- Make the sign on the object (for baby who has some residual vision).
- Place the infant's hands on yours as you make the sign.
- Guide the baby to make the sign on your body.
- Make the same number of movements in the sign as syllables in the spoken word, for example:

  SHOE - one movement
  MAMA - two movements
  BANANA - three movements

EAT



CHAPTER 10

GLOSSARY

Cortical visual impairment: Refers to the brain's inability to perceive or decode visual images. Cortical visual impairment is the result of cerebral injury. The eyes and the optic nerves may be intact, but the visual cortex (the area of the brain which receives and decodes visual images) is affected. Visual functioning may range from no apparent vision to intermittent vision. The vision loss can be transient or permanent, depending on the age at onset and severity of the injury.

Depth perception: Ability to perceive the dimension of objects and their relative position in space.

Distance vision: Measure of visual acuity at a distance of 20 ft.

Extension: Straightening part of the body.

Field loss: Reduction in size of the normal field of vision.

Field of vision or visual field: The area that can be seen without shifting the gaze.

Flexion: Bending part of the body.

Functional: Having a purpose; useful.

Hypertonic: Having too much muscle tone. This interferes with movement.

Hypotonic: Having too little muscle tone. This interferes with stability.

Legal blindness: A measure of distance vision, *not* near vision. It is defined as a visual acuity less than 20/200 in the better eye after the best possible correction; or a visual field limited to 20 degrees or less, even if the acuity is normal. 20/200 means that a person sees at 20 feet what an individual with normal vision sees at 200 feet. A visual field of 20 degrees is similar to looking through a tube. Many people who are legally blind can read print at close range.

Low vision: Covers a range from mild to severe vision loss. Includes individuals who have some functional vision and who may be partially sighted or legally blind.

Mobility: The ability to move.

Near vision: Measure of visual acuity at normal reading distance; about 14 inches from the eyes.

Nystagmus: Rapid or "wiggly" eye movements; may be vertical, horizontal or circular. Nystagmus usually does not appear until 6-8 weeks after birth.

Object concept: The recognition, use and classification of objects.

Object permanence: The knowledge that an object continues to exist when out of sight or touch.

Orientation: Establishing and maintaining one's position in space.

Orientation and Mobility Instructor: A specialist who teaches visually impaired individuals how to move safely.

Partially sighted: Defined as distance visual acuity ranging from 20/70 to 20/200 in the better eye after the best possible correction. A person who is partially sighted may see better under some conditions than others. Lighting conditions are often important. A person who is partially sighted may have "foggy" vision, similar to what you might see in a misted mirror.

Residual vision: Any amount of vision which allows a child to perceive light or discriminate objects.

Totally blind: Without functional vision; some children may have light perception but cannot locate source of light.

Tunnel vision: The visual field is severely reduced; only a small area of central visual acuity remains, similar to looking through a tube.

Visual acuity: Measure of eye's ability to perceive details and shape of objects. *Central visual acuity* is the measure of the eye's ability to distinguish the details and shapes of objects in the direct line of vision.

Visual impairment: Any condition in the visual system (eye, optic nerve, visual cortex) that affects ability to use vision as a primary mode of learning.

CHAPTER 11

RESOURCE LIST

Adaptive Equipment

Ablenet products (pressure switches, battery operated toys and other resources)
Cerebral Palsy Center, Inc.
360 Hoover St., N.E.
Minneapolis, MN 55413
(612) 331-5958

Burkhart, L. (1980). *Homemade battery powered toys and educational devices for severely handicapped children.* Available from author:
8503 Rhode Island Ave.
College Park, MD 20740

Fred Sammons Inc. (Dycem and adaptive feeding equipment):
Box 32
Brookfield, IL 60513-0032

Nuk 3-piece Toothbrush Trainer Set
Reliance Products Corp.
108 Madison St.
Woonsocket, RI 02895

Crib Equipment

Rock-A-Crib Springs
NKR Precision
Route 17 M
Harriman, NJ 10926.
Springs for under the crib legs; they allow the entire crib to rock gently (under $10).

Sleep Tight, available exclusively from Ross Laboratories
1208 East Hudson St.
Columbus, Ohio 43211
(800) 662-6542
Motion and white noise simulates riding in the car (over $60).

Braille/Print Books for Preschoolers

"Riley goes exploring" "What is that?"
Philomel Press
Putnam Publishing Group
390 Murray Hill Rd.
East Rutherford, NJ 07073

Popular children's books with braille overlay (for ages 3-8 yrs):
Children's Braille Book-of-the-Month-Club
National Braille Press, Inc.
88 Saint John St.
Boston, MA 02115

Seedlings Braille Books for Children
8447 Marygrove Drive
Detroit, MI 48221

Twin Vision Books
American Brotherhood for the Blind
18440 Oxnard St.
Tarzana, CA 91356

Booklets for Parents

Available without charge from:
Blind Children's Center
4120 Marathon St. Box 2915
Los Angeles, CA 90029

"Heart to heart: Parents of blind and partially sighted children talk about their feelings"

"Learning to play: Common concerns for the preschool visually impaired child"

"Move with me: A parents' guide to movement development for visually impaired babies"

"Talk to me: A language guide for parents of blind children"

"Talk to me II: Common concerns"

"Welcome to the world: Toys and activities for the visually impaired infant"

Available without charge from:
Overbrook School for the Blind
64th St. & Malvern Ave.
Philadelphia, PA 19151:

The Overbrook Early Childhood Parent Education Series, 1989

Blind Children's Fund
230 Central St.
Auburndale, MA 02166-2399

"Get a wiggle on." Suggestions for encouraging development of infants with visual impairments

"Learning to look." Suggestions for encouraging the use of residual vision

"Move it!!!" Suggestions for encouraging development of children with visual impairments

"Parent Packet #1." Contains informational materials for parents of visually impaired young children

"Watch me grow." A Spanish/ English book with suggestions for facilitating the development of visually impaired infants

KARMES Communication
312 90th St.
Daly City, CA 94015-1898

The retina book: A guide to understanding strabismus and amblyopia
(Approximately $1.00 each)

The Lighthouse
National Center for Vision and
Child Development
111 East 59th Street
New York, NY 10022

O'Mara, B., Lang, M.A., Silverstone, B., & Wilmerding, H.P. (1989). *Pathways to independence: Orientation and mobilility skills for your infant and toddler.*

Quota Club Marion Norbury
2004 Parkade Blvd.
Columbia, MO 65202

CHARGE *Syndrome: A booklet for families*
$1.50

Developmental Booklets for Parents

TASH Technical Assistance Project
Teaching Research
345 North Monmouth Ave.
Monmouth, OR 97361

1. *Infant walkers: Developmental tool or weapon*

A Parents' guide for...

2. *Baby's discovering his hands for visually impaired infants*
3. *Grasp and hand skills for visually impaired infants*
4. *Preparation for eye-hand coordination*
5. *Head and trunk control*
6. *Preparation for rolling*
7. *Preparation for crawling*
8. *Preparation for sitting*
9. *Preparation for standing*

Parent Guides and Reference Books

Bolton, S. (1989). *One step at a time: A manual for families of children with hearing and vision impairments.* Monmouth, OR: TASH Technical Assitance Project.

Brazelton, T. B. (1969). *Infants and mothers: Differences in development.* New York: Dell Publishing.

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Fewell, R. D., & Vadasy, P. F. (1983). *Learning through play: A resource manual for parents and teachers.* Allen, TX: DLM Teaching Resources.

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Harrell, L. (1984). *Touch the baby: Blind and visually impaired children as patients: Helping them respond to care.* New York: American Foundation for the Blind.

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Kastein, S., Spaulding, I., & Scarf, B. (1980). *Raising the young blind child: A guide for parents and educators.* New York: Human Sciences Press.

Kimball, J., & Holland, K. (1985). *The good toy book.* Milwaukee, WI: Brio Scanditoy.

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Parks, S. (1986). *Make every step count: Birth to 1 year developmental parenting guide.* Palo Alto, CA: VORT.

Scott, E. P., Jan, J. J., & Freeman, R. D. (1977). *Can't your child see?* Baltimore, MD: University Park Press.

Sinker, M. (1986). *Toys for growing: A guide to toys that develop skills.* Evanston, IL: National Lekotek Center.

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CHAPTER 12

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American Printing House for the Blind
P. O. Box 6085
Louisville, KY 40206-0085